Nucleotide sequenc Nucleotide sequenc DNA encoding novel Human CSR3 protein DNA encoding novel Human nervous syst Human CSR2 protein

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Title: Perfect score:

Sequence:

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Scoring table:

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ABA17153
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ABK64501
AAD06573
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AAS69026
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Listing first 45 summaries
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Nuclectide sequenc DNA encoding novel Human COL5A3 cDNA Novel human coding

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Prostate cancer-as DNA encoding novel

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tive 0; Mismatches
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arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
low density lipoprotein; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence encodes a human scavenger receptor, designated SRCL-P1. The SRCL-P1 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
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                                                                                                                      AAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAAC
                                                                        TGGGGTCATGGCCCAGGAGAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGG
                                                                                                             AACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTA
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783 A; 661 C; 656 G; 528
                                                           Mismatches
                            Score 1695;
Pred. No. 0;
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arthritis; gene;
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                                                                                                                                                                                                                                     The invention relates to a human scavenger receptor-like protein. protein is useful as a target molecule for diagnosis, prevention treatment of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                           Length 2262;
                                                                                                                                                     New scavenger receptor-like protein for diagnosis, prevention treatment of autoimmune disease, such as rheumatoid arthritis
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Best Local Similarity 99.9%; Pred. No. 0;
Matches 1694; Conservative 0; Mismatches
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2000JP-0375066
                                 27-MAR-2000; 2000JP-0090772
                                                                  (SHIO ) SHIONOGI & CO
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P-PSDB; ABB08642.
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27-MAR-2001

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                                                                                         cancer;
                                                                                      Extracellular matrix and adhesion-associated protein; EXMAD; cance: infilammation; reproductive disorder; carditovascular disorder; immune disorder; musculoskeletal disorder; developmental disorder; gastrointestinal disorder; cell proliferation disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                        Isolated polynucleotide encoding extracellular matrix or adhesion-associated protein (EXMAD) useful for diagnosing, treating reventing disorders associated with expression of EXMAD such as proliferative, immune and genetic disorders:
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Pred. No. 0;
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Matches 1694;
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Azimzai Y;
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Human; cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic; antiflammatory; antibacterial; immunosuppressive; antiparkinsonian; neuroprotective; nootropic; osteopathic; haemostatic; vasotropic; antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic; immunosifunlami; antiparasitic; secreted protein; transmembrane protein; cytokine; cell proliferation; cell differentiation; autoimmune disease; stem cell; growth factor; nervous system disease; neuropathy; Allaheimer's disease; Parkinson's disease; severe combined immunodeficiency; SCID; infection; multiple sclerosis; rheumatoid arthritis; gene therapy; gene; ss.
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                                                                                                                                                                                    AACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTA 1922
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AAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAAC
                                                                                      TGGGGTCATGGCCCAGGAGAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGG
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Spaulding V;
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autoimmune diseases, bone disorders and lung or liver fibrosis

Claim 250; Page 231-232; 284pp; English

The invention relates to human secreted or transmembrane protein (1), their fragments and is encoded by specific complementary deoxyribonucleic acid (CDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to angiogenesis, cytokine, cell proliferation, call differentiation, antibifiammatory, stem cell growth factor activity and activin or inhibin-related activities. (I) can be used to manipulate stem cells in culture to give crise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or reservable. (I) induces the proliferation of neural cells and of secretal and peripheral nervous system diseases and neuropathies, such as required and peripheral nervous system diseases and neuropathies, such as Alzheimer's, Parkinson's disease, amycrophic cativity, regulation of haematopoiesis and is useful for the treatment of activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thronbocytopaenia and for regeneration of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as throndoxytopaenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degeneration of activity as also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, ulcers, ulcombinant protein, as markers for tissues in which the corresponding protein is preferentially expressed and in gene therapy. The present sequence is that of a polynucleotide of the invention

Sequence 2929 BP; 901 A; 699 C; 692 G; 637 T; 0 other;

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480 120 716 180 240 836 360 926 420 657 Gaps 9 GTCACGAATCTGCAGCAAGATACCAGCGTGCTCCAGGGCAATCTGCAGAACCAAATGTAT TCTCATAATGTGGTCATCATGAACCTCAACAACCTGAACCTGACCCAGGTGCAGCAGAGG AACCTCATCACGAATCTGCAGCGGTCTGTGGATGACACAAGCCAGGCTATCCAGCGAATC CTGAAGGAGAAAGTGCAGAGCTTGCAGACGCTGGCTGCCAACAACTCTGCGTTGGCCAAA GCCAACAACGACACCCTGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG GAGAACATCACCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTA AACCTCATCACGAATCTGCAGCGGTCTGTGGATGACACAAGCCAGGCTATCCAGCGAATC AAGAACGACTTTCAAAATCTGCAGCAGGTTTTTCTTCAAGCCAAGAAGGACACGGATTGG DB 24; Length 2929; Indels 1; Score 1681.4; Pred. No. 0; 0; Mismatches 99.2%; 99.9%; Best Local Similarity 99.9 Matches 1693; Conservative Query Match Н 658 717 777 181 241 837 301 897 361 421 61 121 957 ò g δ q ga ΩD οy g ŏλ OD à g õ οy δ

1556 1020 1616 1080 2036 2156 1316 CCCGGCCCTCAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGG 1140 GTGCCTGGACCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCCATGCCAGGCCCCAAG 1200 GGCCCCCCCCGGCCCTCCTGGCCCATCAGGAGCGGTGCTGCCCCTGGCCCTGCAGAATGAG 1260 CCAACCCCGGCACCGGAGGACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAA 1320 TGCTACTATTTTCAGTTGAGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGAC 1976 AAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAAC 1560 840 99 720 900 960 540 TTTACAATACTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAG TCTCTCAGGATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTA GGCCCTCAGGGCCCCCAGTGGGGACCCAGGCCCCCGGGGCCCACCAGGCAAAGAGGGGACTC AAGTCTTCACATCTTGTTTTCATAAACACTAGAGGAACAGCAATGGATAAAAAAAGAG 1077 CTCTTTGAGACGGATATTGTGAACATCATTAGCAATATCAGTTACACAGCCCACCTG CACACAGATGATCTGACCTCCTTGAATAATACCCTGGCCAACATCCGTTTGGATTCTGTT CCTGCCCTGCGGGTGAGAGAGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGC GGCAAAGGATCTAAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCC TGCTACTATTTTCAGTTGAGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGAC CTCTTTGAGACGGATATTGTGAACATCATTAGCAATATCAGTTACACAGCCCACCACCTG CGGACGCTGACCAGCAATCTAAATGAAGTCAGGACCACTTGCACAGATACCCTTACCAAA 1137 1201 1321 1917 1441 2037 2097 1257 1317 1557 1617 1081 1677 1141 1737 1797 1261 1857 1381 1977 481 1197 661 721 781 1377 1437 901 1497 1021 1501 601 961 Db QQ δ qq Qγ q δ q Οý q g ò οp ò g δ g ò g ò qq δ q ŏ qq οy q ò Q õ ò g ò g οy δý

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Query Match
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                                            1680
                                                    This sequence encodes a human secreted protein of the invention. This DNA sequence was isolated from a human adult brain cDNA library, and was designated clone bv272_1. The DNAs and proteins are predicted to have biological activities which would make them suitable for treating, preventing or ameliorating medical conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proteins - derived from
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                        2157 TGGGGTCATGGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGG
                                           AACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTA
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humans and animals, although no supporting data is given. Suggested activities include nutritional sources or supplements, immune stimulating or suppressing activity, haematopoiesis regulating activity, tissue growth activity, activin/inhibin activity, rehemotatic/chemokinetic activity, haemastatic and thrombolytic activity, receptor/ligand activity, and tumour inhibition activity. The DNAs are also stated to be useful for gene therapy. A host cell transfected with the DNA, or its subfragments and variants is useful for recombinant production of the human secreted protein clones.
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99.9%; Pred. No. 0;
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0; Mismatches
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Matches 1693; Conservative
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Wehrman T, Xu
Goodrich R,
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25-APR-2000; 2000US-0552317.
09-JUL-2000; 2000US-0598042.
19-JUL-2000; 2000US-062312.
03-AUG-2000; 2000US-0653450.
14-SEP-2000; 2000US-0653450.
19-OCT-2000; 2000US-0653336.
29-NOV-2000; 2000US-0593344.
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Matches 1674; Conservative
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Wang Z,
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peripheral nervous system; neuropathy; central nervous system;
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous allocalised neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activity, inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, arthritis and inflammation, leukaemias and
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Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
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Xu C, Xue AJ,
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                                                                                                                                                                   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-brager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
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Yang Y,
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Wang Z, Wehrman T, Xu C, Xue AJ,
Zhou P, Goodrich R, Drmanac RT;
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P-PSDB; AAM39686.
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14-SEP-2000;
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         The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42313) with nootropt.

Immunosuppressant and cytostatic activity. The polynuclectides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous system, such as peripheral nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Sydrome. Other uses include the utilisation of the activities such as: Immune system suppression, activity, chemotextic/chemokinetic activity, hamotextic/chemokinetic activity, damotextic/chemokinetic activity, damotextic/chemokinetic activity, damotextic/chemokinetic activity, damotextic/chemokinetic activity, damotextic/chemokinetic activity, arthritis and inflammation, leukaemias and
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                                                                                                    GGCAACAAGGACAGAAAGGAGAGAGAGGGGGAGCCTGGACCACCTGGCCCTGCGGGTGAG
                                                                                                                      CCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGACCTCGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                    1092 CCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGGTGCCTGGACCTTCGGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1152 CTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCGGGCCCCCT
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                                                 CCACCGGGCCCCAGGGGTCCAAGAGGTGAACAGAGGATCCCAGGGACCCCCTGGCCCAACT
                                                                                                                                                                         AGAGGCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGC
                                                                                                                                                                                                                                              TCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCCAGT
                                                                                                                                                                                                                                                                                                                GGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGCCCTCAGGGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCCAACCCCGGCACCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCCGGCCCTTCCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA
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The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, mycoardial infarctions, thrombophiebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention.
                                                                                                                                                                                                                                                                 TGCAGCAGGTTTTTCTTCAAGCCAAGAAGGACACGGATTGGCTGAAGGAGAAAGTGCAGA 259
                                                                                                                                                                                                                                                                                                           GCTTGCAGACGCTGGCTGCCAACACTCTGCGTTGGCCAAAGCCAACAACGACACCCTGG 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCT 979
                                 hundred and eighty seven nucleic acids encoding PRO polypeptides, ful in diagnosis and treatment of cardiovascular (e.g. myocardial
                                         infarction), endothelial or angiogenic disorders in a mammal -
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATGGAGAACATCACCACTATCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAACATCATTAGCAATATCAGTTACACAGCCCACCACCACGGGACGCTGACCAGCAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 560 TAAATGAAGTCAGGACCACTTGCACAGATACCCTTACCAAACACACAGATGATCTGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTGAATAATACCCTGGCCAACATCCGTTTGGATTCTGTTTCTCTCAGGATGCAACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      680 ATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATTATGGAAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTC
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                                                                                                                                                                                                                   87.2%; Score 1477.6; DB 24; Length 2005; 99.7%; Pred. No. 0;
                                                                                                                                                                                                Sequence 2005 BP; 606 A; 493 C; 491 G; 415 T; 0 other;
                                                                                                                                                                                                                                           0; Mismatches
                                                                           Claim 1; Fig 27; 567pp; English
                                                                                                                                                                                                                                           Matches 1491; Conservative
  2002-171999/22.
                                                                                                                                                                                                                                 Best Local Similarity
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                    disorder;
            cancer;
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          Human; anglogenesis; PRO protein; cardiovascularisation; wound;
atheroscleroslis; cardiac hypertrophy; gene therapy; endothelial
cardiant; cytostatic; antianglogenic; hypotensive; vulnerary;
antiarteriosclerotic; gene; ss.
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2000WO-US32678.
2000WO-US34956.
2001US-0767609.
2001US-0806429.
2001US-0806520.
2001US-08062706.
2001US-080689.
2001US-0808889.
2001US-0816744.
2001US-0816744.
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2000WO-US23328.
2000US-230978P.
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2000US-0709238.
2000WO-US30952.
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GERRITSEN M E.
GODDARD A.
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GURNEY A L.
HILLAN K J.
MARSTERS S A.
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PAONI N F.
STEPHAN J F.
WATANABE C K.
WILLIAMS P M.
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FERRARA N.
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18-SEP-2000;
24-OCT-2000;
08-NOV-2000;
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01-DEC-2000;
20-DEC-2000;
22-DEC-2000;
22-JAN-2001;
22-JAN-2001;
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02-AUG-2000;
17-AUG-2000;
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25-MAY-2001;
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09-MAR-2001;
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28-FEB-2001;
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10-MAY-2001;
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                                                                 Homo sapiens
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                                                                                                          31-JAN-2002
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(MARS/)
(PANJ/)
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                                                                                                                                                                                                                                                     GCCCATCAGGAGCGGTGGTGCCCTTGCCAGAATGAGCCAACCCCGGCACCGGAGG 1279
                                                                                                                                                                                                                                                                   1028 GCCCATCAGGAGGGGTGGTGCCCCTGGCCCTGCAGAATGAGCCCCGGGCACCGGAGG 1087
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                                       CCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCCAGTG
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Human; angiogenesis; cardiant, cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; angiogenic disorder; cardiac hypertrophy, atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; rheumatoid arthritis; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; gene; ss.
                                                                                                                                                                                                                                                                                       Human PRO7223 cDNA sequence SEQ ID NO:27.
                                       BP.
                                  ABL88085 standard; cDNA; 2005
                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                         16-MAY-2002
                                                                                                                      ABL88085;
ABL88085
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Homo sapiens

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Sequence 2005 BP; 606 A; 493 C; 491 G; 415 T; 0 other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic cactivities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or anglogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular rehematoid arthritis, angina, mycoardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ŗ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Paoni
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A, Pan J, ;
, Ye W;
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J, Hillan KJ, Marsters SA,
JK, Williams PM, Wood WI,
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                                                                                                                                                                   2000WO US2352.
2000WS - US23328.
2000US - 0664610.
2000US - 0665350.
2000US - 0665350.
2000US - 070228.
2000WO - US3052.
2000WO - US3057.
2000WO - US3057.
2000WS - 0747259.
2000WS - 0747259.
2000WS - 0747259.
2000US - 0747259.
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2000WO-US20710.
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2000US-0643657.
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2001US-0808689.
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                                                20-JUN-2001; 2001WO-US19692
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Godowski PJ, Gurney AL,
Stephan JF, Watanabe CK,
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P-PSDB; ABB84830.
                                                                                                                                         02-AUG-2000;
17-AUG-2000;
23-AUG-2000;
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07 - SEP - 2000;
18 - SEP - 2000;
18 - CEP - 2000;
24 - OCT - 2000;
08 - NOV - 2000;
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14-MAR-2001;
22-MAR-2001;
05-APR-2001;
10-MAY-2001;
10-MAY-2001;
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Godowski PJ,
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01-DEC-2000;
20-DEC-2000;
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25-MAY-2001;
25-MAY-2001;
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28-FEB-2001;
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angloplasty;
low density lipoprotein; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
                                                                                                                                                                                                     1448 ACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA 1503
                                                                                                                                                                                                                                                                       1640 ACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA 1695
          GCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCGGCACCGGAGG
                                      ACAATGGCTGCCCCCCTCACTGGAAGAACTTCACAGACAAATGCTACTATTTTTCAGTTG
                                                                            AGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTT
                                                                                      ACTEGATCEGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACAT
                                                                                                                                                                                                                                  CAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAG
                                                                                                                                                                                            CTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGGTCATGGCCATGGGC
                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of a human scavenger receptor
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2000JP-0309068
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         Length 2005;
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         24;
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       Score 1477.6;
Pred. No. 0;
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                                                                CCTGGCCCTGCGGGTGAGAGAGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGAGCGTGGC
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                             The present sequence encodes a human scavenger receptor, designated SRCL-Pl. The SRCL-Pl polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of exidized low density.
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Pred. No. 0;
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            Japanese
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Best Local Similarity 87.6%;
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arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty; low density lipoprotein; ss.
                                                                                                                                                                                                                                                                                                                                  The present sequence encodes a human scavenger receptor, designated SRCL-P1. The SRCL-P1 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arterlosclerosis, diabetic complications, bacterial infection and restenois following angioplasty, which are associated with accumulation of exidized low density lipoprotein and the binding of advanced glycation end-products into
                                                                                                                                                                                                                                                                          yer receptor proteins SRCL-P1 with collectin-like structure, treatment and diagnosis of diseases associated with oxidized
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2256 BP; 721 A; 524 C; 528 G; 483 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 941; DB 22;
Pred. No. 5.1e-229;
0; Mismatches 0;
                                                                                               receptor"
                                                                                                                                                                                                                                                                                                                   Claim 4; Page 105-109; 118pp; Japanese.
                                                                                                                                                                                                                                                                                               low-density lipoprotein accumulation
                                                                                              "scavenger
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74..1936
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Best Local Similarity 78.1%;
Matches 1323; Conservative
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The invention relates to isolated polynucleotide (1) and polypeptide (11) sequences. (1) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (1) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (1) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations cresponsible for genetic disorders or other traits to assess biodiversity
                                                                                                                                                                                               AACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTA
                                                                                                               TGGGGTCATGGCCCAGGAGAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             forensic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA encoding novel human diagnostic protein #6937
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P-PSDB; ABG06946
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                                                                                                                                                                                                                                                                                                                                                                                                                                            and to produce other types of data and products dependent on DNA amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic coding sequences of the invention.

Note: The sequence data for this patent did not appear in the prinspecification, but was obtained in electronic format directly from
                                                                                                                  DB 23; Length 1521;
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                                                                                                                                             Indels
                                                                                         Sequence 1521 BP; 386 A; 420 C; 425 G; 290 T; 0 other;
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                                                                                                                  Score 883.8; DB 23
Pred. No. 1.5e-214;
                                                                 at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                            0; Mismatches
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99.8%;
                                                                                                                                             Conservative
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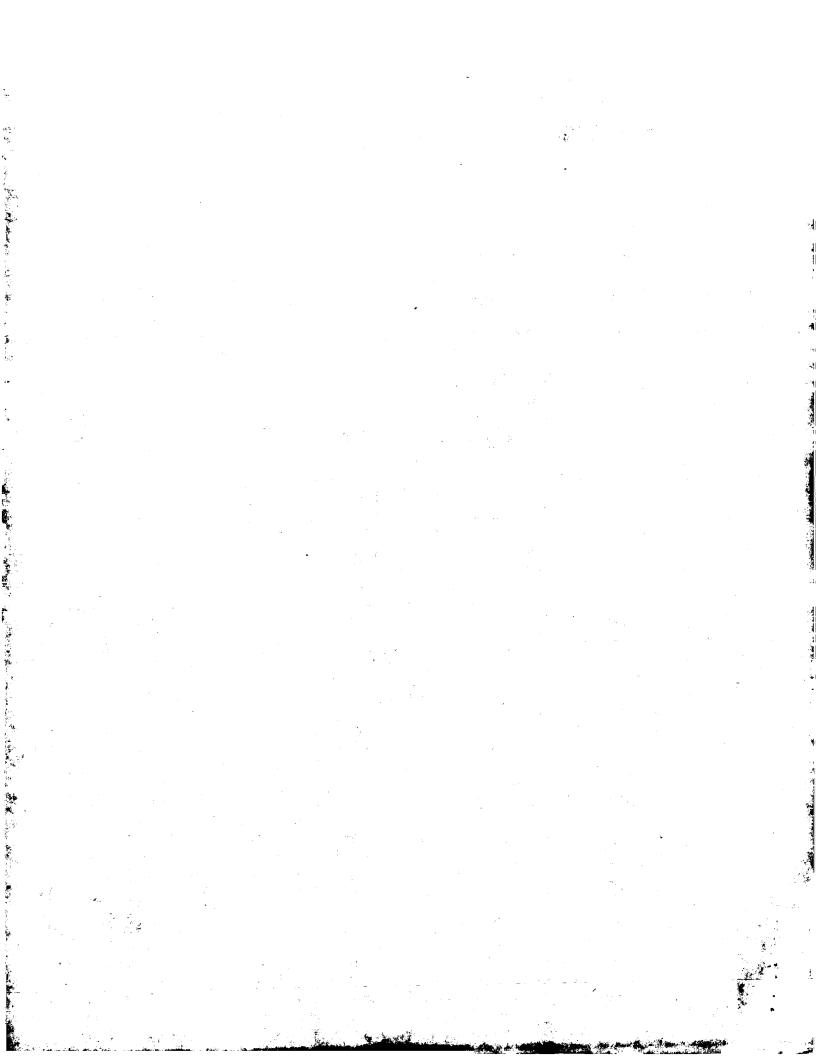
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                                                                               ACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAACATCATTAGCAATATCAG
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                                                                                                                           CSR3; human; macrophage;
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                                          CACAGATACCCTTACCAAACACACACAGATGATCTGACCTCCTTGAATAATACCCTGGCCAA
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TTACACAGCCCACCTGCGGACGCTGACCAGCAATCTAAATGAAGTCAGGACCACTTG
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                                                                                           CATCCGTTTGGATTCTGTTTCTCTCAGGATGCAACAAGATTTGATGAGGTCGAGGTTAGA
                                                                                                                                                                                                                                                                             TGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCACCGGGCCCCAGGGGTCCAAG
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Sequence 60, App
Sequence 1, App
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Sequence 19, App
Sequence 1, Appl
Sequence 2, Appl
Sequence 3, Appl
Sequence 5, Appl
Sequence 6, Appl
Sequence 1, Appl
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
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version 5.1.4_p5_4578 - 2003 Compugen Ltd.
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US-09-397-3678-1

US-08-893-4674-1

US-08-893-4674-1

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US-09-453-702B-50
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Maximum Match 100%
Listing first 45 summaries
                                                                         - nucleic search, using sw model
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GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB seq length: 0
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sednence sed		a)	1 810;	AGGGACC
		Collagen-Like On & HERBERT	Length Indels	ACTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCC
US-09-297-269-40 US-08-159-784-1 US-09-453-702B-66 US-09-463-702B-66 US-09-134-001C-624 US-09-134-001C-624 US-09-134-001C-624 US-09-134-001C-624 US-09-134-001C-634 US-09-1440-804-1 US-09-453-702B-116 US-09-453-702B-137 US-09-453-702B-137 US-09-140-804-10 US-08-1475-155-63 US-08-1475-155-63 US-08-477-509B-98 US-08-642-255-96 US-08-642-255-96	70	it Colli	Score 121.6; DB 1; Pred. No. 6.5e-23; 0; Mismatches 214;	STGACAG
297 - 269 - 1597 - 269 - 1597 - 269 - 1597 - 269 - 1597 - 269 - 1597 - 269 - 1597 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 2697 - 26	ALIGNMENTS	r Weight Cers ers , ALBRITTO ulte 3400 -3/BIR	121.6; No. 6. smatche	CAAGAGG
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<b>せこれななななななななな</b>		US/0864 Joseph Franco A Protein 135 S: S: HOHBACH, ero Cent, ompatibl PC-DoS/M Release ATA: T. C.		SCC.A
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44444444444444444444444444444444444444		-60 5773249 FCRMATION: T: FERRARI, Fra INVENTION: HIGH SAN FRANCE ADDRESS: SEE: FLEHR HOH SAN FRANCE ADDRESS: FLOPRY AT URS READABLE FORM: TYPE: FLOPRY ATTOR: IN PCC- California SAN FRANCE ADDRESS: FLOPRY READABLE FORM: FRE PARTENTION FOR PC- RE: PARTENTION BATA ATTON NUMBER: DATE: FCATION NUMBER: WELFOCKET NUMBE NUMBER: ATTON NUMBER: ATTON NUMBER: CASS ID NO: CHARACTERISTICS SO ID NO: CHARACTERIS	ilarity Conser	AGGTCC#
73.72.7 71.4 71.4 70.7 70 70 67.8 67.8 67.8 67.6 67.6		RESULT 1 US-08-642-255-60 Sequence 60, Application US/08642255 Patent No. 5773249 RAPPLICANT: CAPPELLO, Joseph APPLICANT: FERRARI, Franco A. TITLE OF INVENTION: High Molecular TITLE OF INVENTION: Protein Polyme: NUMBER OF SEQUENCES: 135 CORRESPONDENCE ADDRESS: ADDRESSE: ADDRESSEE: FLEHR, HOHBACH, TEST, STREET: A Embarcadero Center, Su. CITY: San Francisco STATE: California COUNTR: USA CONTRY: BAN FORDES CONTRY: COMPUTER: PatentIN Release #1.0, COMPUTER: PatentIN Release #1.0, COMPUTER: PATENTIN ROBER OF STATE: PATENTIN ROBER OF STATE: CLASSIFCATION NUMBER: US/08/642,25; CLASSIFCATION NUMBER: US/08/642,25; ATTORNEY/AGENT INFORMATION: REFERENCE/DOCKET NUMBER: 20,015 REFERENCE/DOCKET NUMBER: 20,015 REFERENCE/DOCKET NUMBER: ASS556-TELECOMMUNICATION INFORMATION: TELEFHONE: (415) 494-8771 TELE	y Match : Local Similarity :hes 250; Conserv	0
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                                                                                                                                                                                                                                                              409 GCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGACCGGCTGGTCCACCGGGTGCTCCG
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                                                Length 756;
                                              Score 118; DB 1; Length 75
Pred. No. 5.7e-22;
0; Mismatches 200; Indels
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COUNTRY: US
ZIP: 11553
ZOMPUTER: ELOPPY disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN DATA:
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CORRESPONDENCE ADDRESS:
ADDRESSEE: DILWORTH & BARRESE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/08655086
Patent No. 5821089
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NAME: STEEN, DEFREYS S.
REGISTRATION NUMBER: 32,063
REFERENCE/DOCKET NUMBER: 203-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 516-228-8484
TELEPAX: 516-228-8516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: GRUSKIN, ELLIOTT A.
APPLICANT: BUECHTER, DOUGLAS
APPLICANT: ZHANG, GUANGHUI
APPLICANT: CONNOLLY, KEVIN
                                                Query Match 7.0%;
Best Local Similarity 54.3%;
Matches 238; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1149 ACCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCC 1208
                                                                                                                                                                              330 ACCIGGCCCAGCGGGTCCGCCTGGATCTAGAGGTGACCCCAGGACCGCTGGTGCTCCGGG 389
                                                                                                                                                                                                                                                                 570 ATCTAGAGGTGACCCAGGACCGCCTGGTGCTCCGGGACCTGCAGGCCCACCGGGTAGCCG 629
210 ACCACCGGGTGCACCTGGCCCAGCGGGTCCGCCTGGATCTAGAGGTGACCCAGGACCGCC 269
                                                                                            270 TGGTGCTCCGGGACCTGCAGGCCCACCGGGTAGCCGTGGCGATCCGGGACCACCGGGTGC 329
                                                                                                                                                                                                                                                                                                                                                                                                                                                       510 ACCGGGTAGCCGTGGCGATCCGGGACCACCGGGTGCACTGG
                                              450 GGTCCGCCTGGATCTAGAGGTGACCCAGGACCGCCTGGTGCTCCGGGACCTGCAGGCCC
                                                                                                                                       909 TGCGGGTGAGAGAGGCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, FRANCO A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCES. 135
ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1209 CGCCCTCCTGCCCATCAGGAGCGGTGGTGCCCTGGCCCTGC 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/642,255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A55556-3/BIR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8771
TELEFA: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
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DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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LENGTH: 756 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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TOPOLOGY: lir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-642-255-50
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REFERENCE/DOCKET NUMBER: MII-028
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                                                                                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                     TYPE: nucleic STRANDEDNESS:
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                                                                                                                                                                  MOLECULE TYPE:
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                                                                                                                                                                                                  766 CAGCTCATCAAGAATTTTACAATACTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGT 825
                                                                                                                                                                                                                                                                                    284 CGAGGATTGCCCGGAACAGCTGGCCTCCCTGGAATGAAGGGACACAGAGGTTTCAGTGGT 343
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                                                                                                                                     Length 3181;
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                                                                                                                                     DB 1;
                                                                                                                                     Score 113.6; DB 1
Pred. No. 1.6e-20;
                                                                                                                                                                  0; Mismatches
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02-JUN-1994
03-JUN-1994
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APPLICANT: Gyuris, Jeno
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: CDK4 Binding Pr
NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
STREET: 60 State Street
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII(text)
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                                                                                                                                 Query Match 6.7%;
Best Local Similarity 52.5%;
Matches 248; Conservative
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SEQUENCE CHARACTERISTICS:
LENGTH: 3181 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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APPLICATION NUMBER: US,
                                                                  TOPOLOGY: unknown MOLECULE TYPE: CDNA
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565 GAAGTCAGGACCACTTGCACAGATACCCTTACCAAACACACAGATGATCTGACCTCCTTG 624
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                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 217; Indels
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APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPENDENCE ADDRESS:
ADDRESSE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                           Score 112.8; DB 1
Pred. No. 1.1e-20;
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEPAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 61:
                                                                                                                                                                                                                                                                                                                                           6.7%;
                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 506 base pairs
TYPE: nucleic acid
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976 GGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCC 1035
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                                       Length 1608;
                                                                                     0; Mismatches 205; Indels
                                         Score 106; DB 4;
Pred. No. 1.3e-18;
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Patent No. 5691147
GENERAL INFORMATION:
APPLICANT: Gyuris, Jeno
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: CDK4 Binding Proteins
NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/253,155A FILING DATE: 02-JUN-1994 CLASSIFICATION: 435
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TELEPHONE: (617) 227-7400
TELEPAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 20: SEQUENCE CHARACTERISTICS:
                                           6.3%;
52.8%;
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                                           Query Match 6.3
Best Local Similarity 52.8
Matches 229; Conservative
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CURRENT APPLICATION DATA:
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US-08-253-155A-20
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US-09-029-348-19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1072 GAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGG 1131
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ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: DESCRIPTION Of Artificial Sequence: SEQUENCE
OTHER INFORMATION: DERIVED FROM CDNA OF PROCOLLAGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 6.3%; Score 106; DB 1; Length 432; Best Local Similarity 54.0%; Pred. No. 6.8e-19; Matches 217; Conservative 0; Mismatches 185; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1192 GGCCCCAAGGGCCCCCCCGGCCCTCCTGGCCCATCAGGAGCG 1233
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Patent No. 6171827
GENERAL: INFORMATION:
APPLICANT: THE VICTORIA UNIVERSITY OF MANCHESTER
TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: 6087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
                           CLASSIFICATION: 4:5
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, BETLYAM I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A5556-3/BIR
TELECOMUNICATION INFORMATION:
TELEPHONE: (415) 494-8771
TELEPHONE: (415) 494-8771
STELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 48:
SEQUENCE CHARACTERISTICS:
LENGTH: 432 base pairs
TYPE: nucleic acid
STRANDEDNESS:
APPLICATION NUMBER: US/08/642,255
                                                                                                                                                                                                                                                                                                                                                            ; DESCRIPTION: /desc = "synthetic" US-08-642-255-48
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                  FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 19
LENGTH: 1608
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2380 AAATGGTGCTCCGGGGGAACAAGGCCTACAAGGATTAACAGGGCACAAAGGATTTCTTGG 2439
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2680 TGTAAAGAAAGGCTGCCAGGGCTAAAAGGCCTTCCTGGAAATCCAGGCCTAGTAGGACT 2739
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                                                                                                                                                                                                                                                                                                                                join(2..82, 86..97, 101..4399, 4403..4420, 4424
..4465, 4469..4876, 4880..5101)
                                                                                                                                                                                                                                                                                                                                                                                                             Score 100; DB 1; Length 5102;
Pred. No. 8.4e-17;
0; Mismatches 200; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1, Application US/07621091G
Patent No. 5424408
GENERAL INFORMATION:
APPLICANT: Reeders, Stephen T., Morrison, Karen E.,
APPLICANT: G.
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen
TITLE OF INVENTION: Polynucleotides
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Yale University, Office of Cooperative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
                        28,665
ER: 40397/104/BABR
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                                            REFERENCE/DOCKET NUMBER: 4039
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5390
TELEFAX: (202)672-5399
TELEX: 904136
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 5.9%;
Best Local Similarity 52.4%;
Matches 220; Conservative
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OPERATING SYSTEM: Macinto
                                                                                                                                                                                              LENGTH: 5102 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
           SAXE, Bernhard D.
                              REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                  linear
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STATE: Connectic
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COCATION:
US-08-494-168-1
                                                                                                                                                                                                                                                                                                          NAME/KEY:
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APPLICANT: Zhou, Jing
TITLE OF INVENTION: Collagen COL4A6: Gene, Protein and Method
TITLE OF INVENTION: of Detecting Collagen Deficiency
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                        Length 503;
                                                                                                                                                                                                    Indels
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                                                                                                                                                      6.2%; Score 105.4; DB 1;
llarity 52.9%; Pred. No. 1.1e-18;
Conservative 0; Mismatches 201;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEE: Foley & Lardner
: 3000 K Street, N.W., Suite 500
Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/112,465
FILING DATE: 27-AUG-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/494,168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: PC-DOS/MS-DOS
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Patent No. 5731192
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
LENGTH: 503 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                      ; MOLECULE TYPE: CDNA
US-08-253-155A-20
                                                                                                                                                                            Local Similarity
ses 226; Conserv
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                                                                                                                                                        Query Match
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Matches
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Hudson, Billy

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RESULT 10
US-08-399-889-1
Sequence 1, Application US/0839989B
; Patent No. 5973120
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; LOCATION: (1)..(1416)
US-08-399-889-1
                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Calf
                                                                                                                                                                                                                                                                                                  LENGTH: 1416
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US-09-167-364-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1096 CCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGGTGCCTGGACCTCGG 1155
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            283 GGAGCACCAGGTGTCCCCGGTCAGCCAGGGGCCAGAGGTGATCCTGGATTCTATGGATTT 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  916 GAGAGAGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAA 975
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             856 ACTGGCAACAAGGGACAGAAAGGAGAGAAGGGGGAGCCTGGACCACCTGGCCGTGCGGGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 214; Indels
                                                        Query Match 5.9%; Score 99.6; DB 1; Best Local Similarity 51.6%; Pred. No. 5.9e-17; Matches 228; Conservative 0; Mismatches 214;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              POSITION IN GENOME: No. 5424408 known CHROMOSOME/SEGHENT: No. 5424408 known PUBLICATION INFORMATION: No. 5424408e
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/621,091G
FILLING DATE: 11/30/90
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                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: CDNA to mRNA HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bovine lens cDNA
                                                                                                                                                                                                                                                                LENGTH: 1416 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Whole kidney
                                                                                                                                                                                                                                                                              TYPE: Nucleic acid
STRANDEDNESS: Double
                                                                                                                                                                                                                                                                                                                                                                                                                                                DEVELOPMENTAL STAGE
                                                                                                                                                                                                                                                                                                                TOPOLOGY: Linear
                                                                                                                                                                                                                                                                                                                                                                                                              Unknown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMEDIATE SOURCE
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976 GGCTCCCAGGGCCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCC 1035
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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Reeders, Stephen T

APPLICANT: Morrison, Karen E

APPLICANT: Morrison, Karen E

APPLICANT: Hudson, Billy G

TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides

CURRENT APPLICATION NUMBER: US/08/399,889B

CURRENT FILING DATE: 1995-03-07

EARLIER APPLICATION NUMBER: 07/621091

EARLIER APPLICATION NUMBER: 290-11-30

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin Ver. 2.0
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APPLICANT: Reeders, Stephen T
APPLICANT: Morrison, Karen E
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 951263B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 1416;
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Patent No. 6007980
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Best Local Similarity 51.6'
Matches 228; Conservative
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976 GGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCC 1035
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                                                                                             796 GGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCA 855
                                                      Gaps
      Length 1416;
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a Collagenous Domain and the
Polypeptide Chain Encoded by
such a Sequence
                                                  0; Mismatches 214; Indels
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Patent No. 5691197
GENERAL INFORMATION:
APPLICANT: Trygyason, Karl
APPLICANT: Elomaa, Outi
APPLICANT: Rangas, Maarit
TITLE OF INVENTION: No. 5691197el Macrophage Receptor
TITLE OF INVENTION: a Collagenous Domain and the
TITLE OF INVENTION: Polypeptide Chain Encoded by
TITLE OF INVENTION: Such a Sequence
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
      Score 99.6; DB 4;
Pred. No. 5.9e-17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/392,367B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Diskette, 3.50 inch, MEDIUM TYPE: 720 Kb storable COMPUTER: IBM PS/2, Model 35 SX
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ATTORNEY/AGENT INFORMATION:
                                                    Matches 228; Conservative
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      Query Match
Best Local Similarity
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US-08-392-367B-1
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TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 95-1263-2
CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                   Length 1416;
                                                                                                                                                                                                                                                                                                                                 Ouery Match 5.9%; Score 99.6; DB 3; Length 1 Best Local Similarity 51.6%; Pred. No. 5.9e-17; Matches 228; Conservative 0; Mismatches 214; Indels
CURRENT APPLICATION NUMBER: US/09/167,364
CURRENT FILING DATE: 1998-10-07
EARLIER APPLICATION NUMBER: 08/399889
EARLIER FILING DATE: 1995-03-07
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATENTIN VET: 2.0
SEQ ID NO 1
LENGTH: 1416
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Patent No. 6277558
GENERAL INFORMATION:
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; LOCATION: (1)..(1416)
US-09-167-364-1
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; LOCATION: (1)..(1416)
US-09-439-897-1
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FEATURE:
                                                                                                                                                                          TYPE: DNA
ORGANISM: Calf
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961 CCCATGGGGTCCCCTGGAGCTCAGGGAGGTAAAGGTGATGCTGGAAAACCAGGCCTACCA 1020
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Best Local Similarity 51.5%; Pred. No. 7.6e-17;
Matches 229; Conservative 0; Mismatches 216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: Nucleotide-genomic DNA
HYPOTHETICAL: No. 6063901 relevant
HYDTHETICAL: No. 6063901 relevant
NOS-08-893-467A-1
                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Minnich, Richard J.
REGISTRATION NUMBER: 24,175
REFERENCE/DOCKET NUMBER: TRV 2 009
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/893,467A
                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 720 Kb storable
COMPUTER: IBM PS/2, Model 35 SX
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TELEFAX: (216) 241-1666
TELEX: (216) 980162
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1868 base pairs
TYPE: Nucleic acid
STRANDEDNESS: Single
                                                                                                                                                                                                                          Word Perfect 5.1
                                                                                                                                                                                                     DOS 5.
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CLASSIFICATION: 435
  Suite 700
                                                                                                                                                                                COMPUTER: IBM PS/
OPERATING SYSTEM:
SOFTWARE: Word Pe
                                                               'RY: U.S.A.
44114-2518
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                     Cleveland
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COUNTRY:
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US-08-555-669-11
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                                                                                                                                                                                                                                                                                                                                                                                    Length 1868;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No. 6063901el Macrophage Receptor with a Collagenous Domain and the Polypeptide Chain Encoded by such a Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 216; Indels
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Patent No. 6063901

GENERAL INFORMATION.

APPLICANT: Elomaa, Outi

APPLICANT: Elomaa, Outi

APPLICANT: Elomaa, Outi

APPLICANT: Rangas, Maarit

TILE OF INVENTION: An Insolated DNA Sequence For a

TITLE OF INVENTION: No. 6063901el Macrophage Receptor W

TITLE OF INVENTION: Polypeptide Chain Encoded by

TITLE OF INVENTION: Such a Sequence

TITLE OF INVENTION: Such a Sequence

NUMBER OF SEQUENCES: 2

CORRESPONDENCE S. 2

ADDRESSEE: Minnich & MCKee
                                                                                                                                                                                                                                                                                                                                                                                 Score 99.4; DB 1;
Pred. No. 7.6e-17;
                                                                                                                                                                                                                                                                   MOLECULE TYPE: Nucleotide-genomic DNA HYPOTHETICAL: No. 5691197 relevant SANIT-SENSE: No. 5691197 relevant 15-08-392-3678-1
              REFERENCE/DOCKET NUMBER: TRV 2 009
TELECOMMUNICATION INFORMATION:
TELEPHONE: (216) 861-5582
TELEFAX: (216) 241-1666
TELEX: (216) 980162
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141 CTTCTGGGCCAGCAGGACCCCGG 1165
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24,175
                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match 5.9%;
Best Local Similarity 51.5%;
Matches 229; Conservative
                                                                                                                                                                         LENGTH: 1868 base pairs
TYPE: Nucleic acid
STRANDEDNESS: Single
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                    Linear
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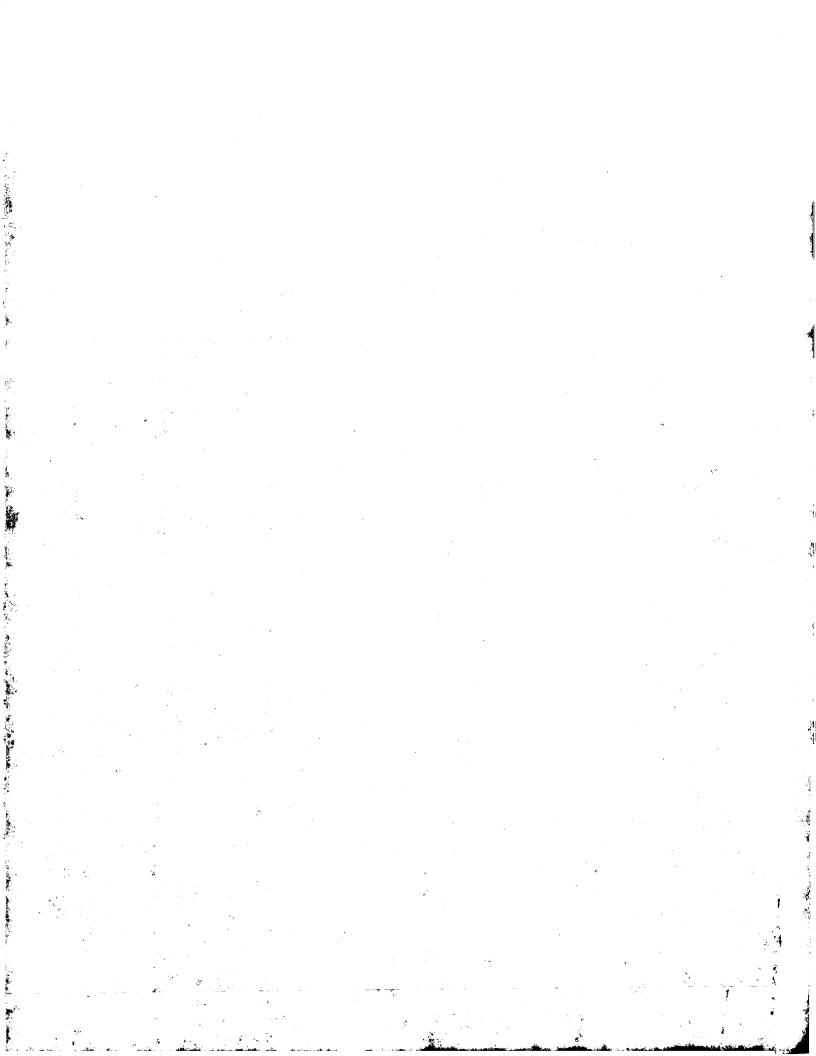
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Sequence 11, Application US/08555669
Patent No. 5773248
GENERAL INFORMATION:
APPLICANT: Brewton, Richard
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches 216; Indels
                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUBER: US/08/555,669 FILING DATE: 13-NOV-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 99.4; DB 1;
Pred. No. 8.8e-17;
                                                                                                                                                                          ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INPORMATION:
NAME: Halluin, Albert P.
REGISTRATION UNUBER: 25,227
REFRENCE/DOCKET UNWBER: 8389-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-3660
TELEFAX: 415-854-3694
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.9%;
Best Local Similarity 51.5%;
Matches 229; Conservative
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LENGTH: 2543 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
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; LOCATION:
US-08-555-669-11
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944 CCGGGCATGCCAGGCAAGGACGGCCAGAATGGCGTGCCAGGACTCGATGGCCAGAAGGGA 1003
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1004 GAGGCTGGTCGCAACGGTGCTCCGG 1028 1213 CCTCCTGGCCCATCAGGAGCGGTGG 1237 ò g

Search completed: March 21, 2003, 08:25:28 Job time: 79.7466 secs



Nucleotide sequenc DNA encoding novel Nucleotide sequenc DNA encoding novel

Lung cancer relate Human CSR3 protein

Human CSR1 protein

Human nervous syst

DNA encoding novel DNA encoding novel DNA encoding novel Collagen-like poly Human breast cance Human breast cance Human breast cance Murine Collagen-like poly Human breast cance Murine Collagen-like poly Human benign prost Bovine alphal(I) c Mouse ischeemic co Human collagen-like poly Human benign prost Bovine alphal(I) c Mouse ischeemic co Human collaging novel Human collaging novel Bovine alphal(I) c

Human EST-derived DNA encoding novel Prostate cancer-as Nucleotide sequenc DNA encoding novel Human COL5A3 CDNA Novel human coding

DNA encoding novel

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Searched:

DNA encoding human Human type IV coll Murine adipocytes-

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 Nucleotide sequenc
Human angiogenesis
Human PRO7223 cDNA
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                                                                            March 21, 2003, 00:58:31 ; Search time 269.408 Seconds
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11326.533 Million cell updates/sec
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N. Cerneseq. 101001:

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1 atgcaacaagatttgatgag......agaaaaaggttatcatcccg 1355
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           GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                               2185239 seqs, 1125999159 residues
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Maximum Match 100%
Listing first 45 summaries
                                                         nucleic search, using sw model
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AAH43036
ABL95574
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Match Length
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1337.4
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AAH43036 standard; DNA; 2628
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Matches 1355; Conservative
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                                                             Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
                                                                                                                                                                                                                                                                                                                                                                    The present sequence encodes a human scavenger receptor, designated SRCL-11 The SRCL-19 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density
                                                                                                                                                                                                                                                                                                              useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
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                                            Nucleotide sequence of a human scavenger receptor
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low density lipoprotein; ss.
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2000JP-0309068,
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Matches 1355; Conservative
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The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, may cardial infarctions, thrombophiebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           958 CCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCC 1017
                                                                                                  Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF;
Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W;
                                                                                                                                                                                          One hundred and eighty seven nucleic acids encoding PRO polypeptides. useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 TCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAG
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                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2005 BP; 606 A; 493 C; 491 G; 415 T; 0 other;
                                                                                                                                                                                                                                            Claim 1; Fig 27; 567pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 99.9
Matches 1349; Conservative
              PAN J.
PAONI N F.
STEPHAN J F.
WATANABE C K.
  MARSTERS S A.
                                                                                                                                                       WPI; 2002-171999/22
                                      (STEP/) STEPHAN J
(WATA/) WATANABE C
(WILL/) WILLIAMS H
(WOOD/) WOOD W I.
                                                                                                                                                                    P-PSDB; ABB95436
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                                                                                                                                                                 Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer;
atherosclerosis; cardiac hypertrophy; gene therapy; endothelial disorder;
cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary;
antiarteriosclerotic; gene; ss.
                                                                                                                                           Human angiogenesis related cDNA PRO7223 SEQ ID NO: 27.
 2594 TGGAACACTCCAATCAGAAAAGGTTATCATCCCG 2628
                                                                ВР
                                                             ABL95574 standard; cDNA; 2005
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2000US-220624P.
2000US-220664P.
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2000US-230978P.
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2001WO-US00000
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                                                                                                                  (first entry)
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GODOWSKI P J.
GURNEY A L.
HILLAN K J.
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FERRARA N.
GERBER H.
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25-JUL-2000;
28-JUL-2000;
28-JUL-2000;
10-AUG-2000;
23-AUG-2000;
23-AUG-2000;
24-AUG-2000;
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05-APR-2001
10-MAY-2001;
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25-MAY-2001;
30-MAY-2001;
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28-FEB-2001;
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14-MAR-2001;
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Gaps

1; Indels

120 597 180 657 240 717 300 777 360 837 420 897 480 957 540

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wound healing; chromosome mapping; gene mapping;
                Ношо
Human; anglogenesis; cardiant; cytostatic; antianglogenic; hypotensive; vulnerary; antiatteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; anglogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; anglogenic disorder; cardiac hypertrophy; atherosclerosis; nypertension; arterial restenosis; anglua; rheumatoid arthritis; myocardial infarction; thrombophlebitis; lymphanglits; tumour anglogenesis; breast carcinoma; liver carcinoma;
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                     GCACCGGAGGACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTAT
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ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 to ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or anglogenic disorder in a mammal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour anglogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paon1 NF;
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Stephan JF, Watanabe CK,
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WO200200690-A2.
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01-MAR-2001;
09-MAR-2001;
14-MAR-2001;
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25-MAY-2001;
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CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT

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                                                                                                                              CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
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                                      DB 24; Length 2005
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gene mapping. ABL88259 to ABL88267 represent
the exemplification of the present invention.
                                                    1; Indels
                      T; 0 other;
                                   Score 1337.4;
Pred. No. 0;
0; Mismatches
                       415
                      606 A; 493 C; 491 G;
                                    Query Match 98.7%;
Best Local Similarity 99.9%;
Matches 1349; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang
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1438 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACGGGGGGACAGTACTCTTT
                            GCATTATAACGGACTGTGATGGGATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGG
                                     CCAATTACTGAAAAAATTGACAGCTAGTGTTTTTTACCATCCGTCATTACCAAAGAC
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Zhang J
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Yang Y,
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Wehrman T, Xt
Goodrich R,
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2000us-0552317.
2000us-059042.
2000us-0620312.
2000us-0653450.
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25-APR-2000; 2
09-JUL-2000; 2
19-JUL-2000; 2
03-AUG-2000; 2
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19-OCT-2000;
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Wang J, 1
Zhao QA,
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                                                                                                                                                           Immunosuppressant and cytostatic activity. The polynuclectides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to tract diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system as of neuropathies and central nervous system diseases, such as alzeeiner's, Parkinson's disease, Huntington's disease, amyotrophic lateral sciencess, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, activity, chemotectic/chemokinetic activity, hemotectic/chemokinetic activity, democratic/chemokinetic activity, damession, assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C.N.S disorders.
Note: The sequence data for this patent did not form part of the printed specification.
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                                                                                                              The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic,
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Pred. No. 0;
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                                                     Claim 1; SEQ ID NO 1045; 10078pp; English.
  central nervous system injuries
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                CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                     GGCCATGGGCCAGGAGAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
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                                                                                                                                                                                                            The present invention provides the protein and coding sequences for 25 novel extracellular matrix and adhesion-associated proteins (EXMADS). These are designated EXMAD-1, EXMAD-2, EXMAD-4, EXMAD-5, EXMAD-7, EXMAD-7, EXMAD-10, EXMAD-11, EXMAD-12, EXMAD-13, EXMAD-11, EXMAD-11, EXMAD-12, EXMAD-13, EXMAD-11, EXMAD-13, EXMAD-13, EXMAD-14, EXMAD-15, EXMAD-16, EXMAD-17, EXMAD-17, EXMAD-19, EXMAD-20, EXMAD-21, EXMAD-23, EXMAD-21, exmadp-23, EXMAD-24 and EXMAD-25. They are useful in the prevention and treatment of cancers, cell proliferation, cardiovascular, reproductive, immune, musculoskeletal, developmental and gastrointestinal disorders and inflammation.
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                                                                                                                                                                                                                                                                                                                                                                                    DB 22; Length 2641;
                                                                                                             Isolated polynucleotide encoding extracellular matrix or adhesion-associated protein (EXMAD) useful for diagnosing, tre preventing disorders associated with expression of EXMAD such
                             Baughn MR,
                                                                                                                                                                                                                                                                                                                                                        Sequence 2641 BP; 823 A; 628 C; 608 G; 582 T; 0 other;
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                                                                                                                                                                                    Claim 4; Page 121-122; 129pp; English
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Best Local Similarity 99.9%;
Matches 1349; Conservative (
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Secreted protein; human; nutritional supplements; immune stimulant; immune suppressor; haematopoiesis regulator; tissue growth; chemotaxis; activin/inhibin; chemotaxis; haemostasis; thrombolysis; receptor/ligand activity; anti-inflammatory; tumour inhibitor; cadherin/tumour invasion suppressor; ds.
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                                                                                                                                           CAGGGCCCTCCTGGCTTCCAGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
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This DNA sequence was isolated from a human adult brain cDNA

This DNA sequence was isolated from a human adult brain cDNA

This DNA sequence was isolated from a human adult brain cDNA

This DNA sequence was isolated from a human and proteins

Suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested cativities include nutritional sources or supplements, immune stimulating or suppressing activity, heamatopolesis regulating activity, classing activity, heamstophisty, cadherin/tumour receptor/ligand activity, anti-inflammatory activity, cadherin/tumour real so stated to be useful for gene therapy. A host cell transfected with the DNA, or its subfragments and variants is useful for recombinant production of the human secreted protein clones.
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                                                                                                                                                                                                                                                                                                                                                                                                          New polynucleotides encoding secreted human proteins -
human foetal brain, adult brain, foetal kidney, adult
retina, adult placenta or adult uterus cDNA libraries
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                                                                                                                                                                                                                                                                                                                 Jacobs K,
Treacy M;
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Pred. No. 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 26; Page 87-88; 127pp; English
                                                                                                                                                                                                                                                                                                               SH,
V,
                                                                                                                                                                                                                                                                                                               K, Howes Spaulding
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970S-0868898.
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99.8%;
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Best Local Similarity 99.8
Matches 1348; Conservative
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P-PSDB; AAW73628.
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04-JUN-1997;
04-JUN-1997;
04-JUN-1997;
04-JUN-1997;
W09855614-A2
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                             10-DEC-1998
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous system diseases, such as localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, chemotactic/chemokinetic activity, haemostatic assays for receptor activity, arthritis and inflammation, leukaemias and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            he sequence data for this patent did not form part of the printed
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                                                                                                                                                   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer peripheral nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; anyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wang
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Zhang J;
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Xu C, Xue AJ,
t, Drmanac RT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   such as central nervous system injuries
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                                                                                                                        polynucleotide SEQ ID NO 4617
                            AAI60628 standard; cDNA; 2181 BP
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Wang Z, Wehrman T, X
Zhou P, Goodrich R,
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2000US-0552317.
2000US-0598042.
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2000US-0653450.
2000US-0662191.
2000US-0693036.
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P-PSDB; AAM41472.
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09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
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29-NOV-2000;
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Zhao QA,
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            AA160628
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                              ATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATA
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Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
                                                              The invention relates to human secreted or transmembrane protein (I),
                 TTGGGAACTAAAATGTTCCCCAGGGTGATATGCTGATTTTCATTGTGCACATGACTGAA
                                                                                         TCACATAGATTCTCCTCCGTCAGTAACCGT-GCGATTATACAAATTATGTCTTCCAAAGT
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                                                                                                                                       ATGGAACACTCCAATCAGAAAAAGGTTATCAT 1351
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Spaulding V;
                                                                                                                                                                                                                                               Human polynucleotide SEQ ID NO 69
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their fragments and is encoded by specific complementary deoxyribonucleic acid (cDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventially free from amailain proteins. (I) are useful for preventing, treating or prevention of tumours. (I) exhibits activity relating to angiogenesis, correctly prout factor activity and activity relating to angiogenesis, correctly growth factor activity and activity no rinhibin-related activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or genetic disorders. (I) induces the proliferation of neural cells and regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis. (I) is involved in chemotactic or chemokinetic activity, regulation of haematopoiesis and is useful for treating myeloid and for regeneration of bone, cartiage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, inclisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis, debetes mellitus, mysathenia gravis, alberge, reactions and conditions, contractions and conditions, contractions and conditions.
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treatment of autoimmune disease, such as rheumatoid
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                                                                                                                                                                                          2000JP-0090772.
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Page 88-93; 118pp; Japanese.
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                                                                                                                                                                                                                                                                                                                     Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
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                                                                                        CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                   GATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
                                                                                                                            2074 GAIGGGACAICICCAGACIACAAAATIGGAAAGCIGGACAGCCGGAIAACIGGGGICAI
                                                                                                                                           GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
                      TTTTCAGTTGAGAAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCA
                                                                                                                      Nucleotide sequence of a human scavenger receptor.
                                                                                                                                                                                                                                                                                                                                                                                        "scavenger receptor"
                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                             arteriosclerosis; diabetes;
low density lipoprotein; ss.
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2000JP-0309068.
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P-PSDB; AAG63347.
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The present sequence encodes a human scavenger receptor, designated SRCL-P1. The SRCL-P1 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into
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es 228;
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Pred. No. 9.5e-
0; Mismatches
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                                                                          AACCAATTACTGAAAAAAATTGACAGCTAGTGTTTTTTACCATCCGTCATTACCAAAG 1198
                                                                                                                                                                                                                           GAATCACATAGATTCTCCTCCGTCAGTAACCGTGCGATTATACAAATTATGTCTTCCAAA 1317
                                                                                                                                                                                                                                                                                                                                                                           Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
     ATATTATAACAGCATGATATAATAGCAGAAACATATTTTCTGATGCCTCTGAAAGCCGAA
                                                                                                                                        CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                                GCATTATAACGGACTGTGATGGGATCACATGAGCAAATTTTCA--GCTCTCAAAGGCAAA
                                                                                                                                                                       ACTIGGGAACTAAAATG-TICCCCAGGGTGATAIGCIGATTITCAITGIGCACATGGACT
                                                                                                                                                                                                     GAATCGCATAGATTTTCTCAGCCATTAACCATAGAATTTATGCAAAGTATATCTTTCCAA
                                    GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
                                                                                                                                                                                                                                                                                                                                                           DNA encoding novel human diagnostic protein #6937
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2000US-0649167
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23-AUG-2000;
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymeratase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations and to produce other types of data and products dependent on DNA and and can diagnostic coding sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at the invention:
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99.8%; Pred. No. 6.7e
ive 0; Mismatches
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Length 2256;

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                                                                                                                                                                                                                                                               Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
low density lipoprotein; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence encodes a human scavenger receptor, designated SRCL-Pl. The SRCL-Pl polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into cells.
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                           CATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAA
GGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGC
                                                                                                                           TGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGT 1010
                                                                                                                                   Sequence 2256 BP; 721 A; 524 C; 528 G; 483 T; 0 other;
                                                                                                                                                                                                                                              Nucleotide sequence of a human scavenger receptor.
                                                                                                                                                                                                                                                                                                                                                receptor"
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                         Score 743.8;
Pred. No. 1.6
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                                                                     Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                       DNA encoding novel human diagnostic protein #6935.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID No 6935; 103pp; English.
                                                                                                                                                                                                                                                                                              30-MAR-2001; 2001WO-US08631
                                                                                                                                                                                                                                                                                                                                         31-MAR-2000; 2000US-0540217
23-AUG-2000; 2000US-0649167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P-PSDB; ABG06944
                                                                                                                                                                                             WO200175067-A2.
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Human; nootropic; neuroprotective; cytostatic; dermatological; virucide; imunosoppressive; antihiflammatory; anti-HHV; antibacterial; vulnerary; antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective; antiinflammatory; antializetic; antiflaibactic; antionvalusant; antifungal; antiparastic; cardiant; immune disorder; cardiovascular disorder; neurological disease; infection; nephrotropic; gene therapy; vaccine; ds.
                                                                                                                                                         GATATGCT-GATTTTCATTGTGCACATGGACTGAATCACATAGATTCTCCTCCGTCAGTA 1285
                                                                                                                                                                        1048 CATGAGCAAATTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCACCTTC
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                         253 CATGAGCAAATTTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCACCTTC
                                                    Human nervous system related polynucleotide SEQ ID NO 9484.
                                                                                                                                                                                                                                                                                                   ABA17153 standard; DNA; 5041 BP.
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2000US-0198123.
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08-NOV-2000;
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The invention relates to novel genes (ABA11004-ABA21534) and proteins (ABB14678-ABB18001) useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. The genes are isolated from a range of human tissues disclosed in the specification. The nucleic acids, proteins, antibodies and (ant)agonists are useful in the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the adrenal gland, bone marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's disease, allergies, autoimmune chaemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g. cerebral anoxia and parasitic infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acids encoding 3224 human nervous system antigen polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful for preventing, diagnosing and/or treating nervous system cancers and metastases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 9484; 1701pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rosen CA, Barash SC, Ruben SM
                                                                                2000US-0246611.
2000US-0246613.
2000US-0249207.
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Sequence 5041 BP; 1480 A; 1074 C; 1103 G; 1384 T; 0 other

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24.5%; Score 332; DB 22;
Best Local Similarity 99.7%; Pred. No. 1.3e-75;
Matches 343; Conservative 0; Mismatches 0;
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AR03538 Alvinela
AF03538 Alvinella
BC003705 Mus musculu
AX34792 Sequence
X55018 H. sapiens m
X75911 B. taurus mR
AF59590 Bos tauru
BC002318 Homo sapi
BC008760 Homo sapi
BC07251 Homo sapi
BC02579 Homo sapi
BC0725 CDNA encodi
D90279 Human mRNA
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M76720 Chinese ham
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ACO24368 Homo sapi
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Compugen Ltd.
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          GenCore version
Copyright (c) 1993 - 2003
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Listing first 45 summaries
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Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Department of Microbiology; 2-1:-1 Midorigaoka-Higashi, Asahikawa,
Hokkaido 078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:+81-166-68-2393, Fax:+81-166-68-2399)
Location/Qualifiers
1. 2983
/ Organism="Homo sapiens"
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/ Ab_xref="taxon:9606"
/ Ab_xref="taxon:9606"
/ Ab_xref="taxon:9606"
         2983 bp mRNA linear PRI 21-NOV-2001 for collectin placenta 1, complete cds.
                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
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The membrane-type collectin CL-Pl is a scavenger receptor vascular endothelial cells
J. Biol. Chem. 276 (47), 44222-44228 (2001)
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Ohtani, K.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 264)
Bandman,O., Hillman,J.L., Tang,Y.T., Lal,P., Yue,H., Baughn,M.R.,
Lu,D.A. and Azimzai,Y.
Extracellular matrix and adhesion-associated proteins
Patent: WO 0068380-A 39 16-NOV-2000;
Incyte Genomics, Inc. (US)
Location/Qualifiers
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3058 bp mRNA linear PRI 08-MAR-2001
Homo sapiens SRCL mRNA for scavenger receptor with C-type lectin
type I, complete cds.
AB038518
AB038518.1 GI:13365514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (sites)
Makamura,K., Funakoshi,H., Miyamoto,K., Tokunaga,F. and Nakamura,T.
Molecular cloning and functional characterization of a human
scavenger receptor with C-type lectin (SRCL), a novel member of a
scavenger receptor family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 (bases 1 to 3058)
Nakamura, K. and Nakamura, T.
Direct Submission
Submisticad (18-FEB-2000) Kenji Nakamura, Osaka University Medical
School, Division of Biochemistry, Biomedical Research Center; 2-2
School, Division of S65-0871, Japan
(E-mall:knakamureonbich.med.osaka-u.ac.jp,
Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /product="scavenger receptor with C-type lectin type I"
/protein_id="BAB39147.1"
/db_xref="GI:13365515"
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/organism="Homo sapiens"
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209. .2437
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/gene="SRCL"
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Conservative:
Mismatches:
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/gene="SRCL"
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Ohtani, K., Suzuki, Y., Eda, S., Kawai, T., Kase, T., Keshi, H., Sakai, Y., Fukuoh, A., Sakamoto, T., Itabe, H., Suzutani, T., Ogasawara, M., Yoshida, I. and Wakamiya, N. CDNA cloning of mouse CL-P1 gene
Unpublished
I to 2637)
Sakai, Y. Eukuoh, A., Sakamoto, T. and Wakamiya, N. Direct Submission
IL Submitted (18-3NN-2002) Katsuki Ohtani, Asahikawa Medical College, Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido 078-8810, Japan (E-mail:Ohtani, Bashikawa-med.ac.jp, Tel:81-166-68-2393, Pax:81-166-68-2399)
                                    Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus.
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ATGTATTCTCAGAGCGTGGTTATCATGAACCTCAACAACCTGAACCTAACCAGGTTCAG
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Mismatches:
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/protein_id="BAC05523.1"
/db_xref="GI:21901969"
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Matches:
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1. .2637
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                  Mus musculus tissue_lib:Liver
Mus musculus
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GI:21901968
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92. .2320
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                                              Mammalia; Eutheria;
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                                                      REFERENCE
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         ArgG1yG1yLysG1ySerLysG1ySerG1nG1yProLysG1ySerArgG1ySerProG1y
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STNSELSTFREDILDLRQQLQEITEKTSKNKDTLEKLOANDSSLVDROSQLKETLQNN
SFLITTVNKTLQARGYTVHLQQDTRVLQSQNYSQSVVIMILANLUNTYOVORN
LISNLQQSVDDTSLAIQRIKNDFQNLQSQNYSQSVVIMILANLUNTYOVORN
LISNLQQSVDDTSLAIQRIKNDFQNLQOVFLQAKKDTDWLKEKVQSLQTLAANNSALA
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REQVEFTDIVNIISNISYTAHHLRTLTSNLNDVWTTCTDTLTRHTDDLTSLNNTLNNI
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KGDRGSQGPPGPTGNKGQKGEKGEPGPPGFAGGTIGPVGPPGERGSKGSKGSGPR
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Nakamura,K. and Nakamura,T.
Nakamura,K. and Nakamura,T.
Nakamura,K. and Nakamura,T.
Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medical School, Division of Biochemistry, Biomedical Research Center; 2-2 yamadaoka, Suita, Osaka 565-0871, Japan (F-mall:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Craniata; Vertebrata; Euteleostomi;
Sciurognathi; Muridae; Murinae; Mus
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Mus musculus src1 mRNA for scavenger receptor with C-type lectin,
GATAAATGCTACTATTTTCATTGGAAAAAGAAATTTTTGAAGATGCTAAGCTTTTCTGT 1996
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                                                                                                                                                                                                                                                                                      LysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsn
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                                        GluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLys
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Mammalia; Eutheria; Rodentia;
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    (sites)
    Nakamura, K., Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T.

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Primates; Catarrhini; Hominidae;
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Mammalia; Eutheria;
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LPGVPGMPGPKGPPGPPGPSGAVVPLALQNEPTPAPEDNSKSKPSLQPGGQGSACA"
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                                                                                                               Direct Submission
Submitted (04-DEC-2000) Kenji Nakamura, Osaka University Gradu
School of Medicine, Division of Biochemistry, Biomedical Resea
Center; 2-2 yamadaoka, suita, Osaka 565-0871, Japan
(E-mail:knakamur/Goobich.med.osaka-u.ac.jp, Tel:81-6-6879-3783,
Pax:81-6-6879-3789)
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Molecular cloning and functional characterization of a h
scavenger receptor with C-type lectin (SRCL), a novel mes
scavenger receptor family
scavenger receptor family
Biochem. Biophys. Res. Commun. 280 (4), 1028-1035 (2001)
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2 (bases 1 to 4330)
Nakamura, K. and Nakamura, T.
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PheGlnLeuPheGluThrAspIleValAsnIleIleSerAsnIleSerTyrThrAlaHis
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2028	410	2088	410	2148	410	2208	410	2268	410	2328	410	2388	410	2448	410	2508	410	2568	410	2628	410	2688	410	2748	410	2808	410	2868	410	2928	410	2988	410	3048	410
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BASE COUNT ORIGIN	JUNT 606 a 493 c 491 g 415 t	- o <sub>y</sub>		ProG1yP
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Percent : Best Loca	larity: 99.60% imilarity: 99.20%	qo .	967 CJ	CTGCCAG
DB:	Gaps:	a a		GGCCCAT
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Qy 69	69 SerLeuGluThrLeuAlaAlaAsnSerAlaLeuAlaLysAlaAsnAsnAspThrLeu 88 	Qy dg	429 G1 	GluLysG         GAGAAAG
	GluaspwetasnSerGluLeuasnSerPheThrGlyGluMetGluAsnIleThrThrIle	Qy		PhelleA:
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	MetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGly		ORGANISM	Homo : Eukar
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Qy 289 Db 727		FEAT	FEATURES SOUTCE	
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32.	329 GIYASPEROGIYPROPROGIYPROPROGIYLYSGIUGIYLEUPROGIYPROGINGIYPRO 348	Scor	 	

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	SerGinAlaAsnGluGinAsnLeuLysAspLeuGinAspLeuHisLysAspAlaGluAsn 	128 247
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	ArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLySGlySerLySGly 	308
	SerGinGlyProLysGlySerArgGlySerProGlyFroGlyProGlnGlyProSer 	328 846
	GlyAspProGlyProProGlyProProGlyLuglucijyLeubroGlyProGlnGlyPro 	348 906
	ProglyPheGlnGlyLeuGlnGlyThrValGlyGluBroGlyValProGlyProArgGly 	368 966
	LeuproGlyLeuProGlyValProGlyWetProGlyProLysGlyProProGlyProPro 	388

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Genome Project.
This clone (DKFZp547G1215) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available at http://mips.gsf.de/proj/cDNA/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HSM802985 1886 bp mRNA linear PRI 20-MAR-2002
Homo sapiens mRNA; cDNA DKF2p547G1215 (from clone DKF2p547G1215).
AL713657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DYFZ): Email s.Wiemane@dkfz.heidelberg.de, seguenced by BMFZ (Biomedical Research Center at the Charite, Berlin/Germany) within the cDNA sequencing consortium of the German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutherita; Primates; Catarrhini; Hominidae; Homo. (Dases 1 to 1886)
Koehrer,K., Beyer,A., Mewes,H.W., Weil,B. and Wiemann,S. Direct Submission
Submitted (12-MAR-2002) MIPS, Am Klopferspitz 18a, D-82152 Martinsried, GERNANY
                                                                                                            /tissue_type="brain"
/clone_lib="547 (synonym: hfbr1). Vector pSportl; host
DH10B: sites Not1 + Sal1"
1. .1886
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                                    967 CTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCCGGCCCTCCT 1026
                                                                                                                                                                                                                                                                    449 PheIleAsnThrArgGluGluGlnGlnTrpIleLysLysGlnMetValGlyArgGluSer 468
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/map="18p11.3"
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      receptor (Mus
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    /note="similarity to asialoglycoprotein
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Conservative:
Mismatches:
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                                                                                                           /gene="DKFZp547G1215"
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/gene="DKFZp547G1215"
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Birren, B., Linton, L., Nusbaum, C., Lander, E., Allen, N., Anderson, M., Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B., Brown, A., Castle, A., Collangelo, M., Collins, S., Collymore, A., Cooke, P., Castlano, K., Dewar, K., Domino, M., Donelan, L., Doyle, M., Ferreira, P., FitzHugh, W., Forrest, C., Funke, R., Gage, D., Galagan, J., Gardyna, S., Grant, G., Hagos, B., Heaford, A., Horton, L., Howland, J.C., Johnson, R., Jones, C., Kann, L., Karatas, A., Klein, J., Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N., McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Meldrim, J., Marlor, J., Norman, C. H., O'Connor, T., O'Donnell, P., Peterson, K., Pollara, V., Riley, K., Sontos, R., Severy, P., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Tirrell, A., Vassiliev, H., Vo, A., Wheeler, J., Wu, X.,
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1 (bases 1 to 169088)

Birren, B., Linton, L., Nusbaum, C. and Lander, E.

Homo sapiens chromosome 18, clone RP11-324G2
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CCAGGCCCCCCGGGCCCACCAGGCAAAGAGGAGACCCCCGGCCCTCCTGGG
                                                                                               GlyCysProProHisTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLys
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AC016128.4 GI:10046526
HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens.
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clone\_end:T7

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                                                 Center for Genome
                                                                                                                                                                                                                    Research
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                                                                                                                                                                                                                                                                                                                                                     Center clone name: 324_G_2
Sequencing vector: M13; M77815; 108 of reads
Sequencing vector: M13; M77815; 1008 of reads
Chemistry: Dye-terminator Big Dye; 100% of reads
Assembly program: Phrap; version 0.960731
Consensus quality: 167248 bases at least Q40
Consensus quality: 167248 bases at least Q30
Consensus quality: 167966 bases at least Q20
Insert size: 177000; agarose-fp
Insert size: 167386; sum-of-contigs
Quality coverage: 6.2 in Q20 bases; sum-of-contigs
Quality coverage: 6.5 in Q20 bases; sum-of-contigs
                   Direct Submission Submittel (20-NOV-1999) Whitehead Institute/MIT Center fo Submitted (20-NOV-1999) Whitehead Institute/MIT Center for Sesarch, 320 Charles Street, Cambridge, MA 02141, USA On Sep 9, 2000 this sequence version replaced gi:6649269. All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997) http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                            Center: Whitehead Institute/ MIT Center for Genome
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                                                                                                                                                                                                                                                            Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
------ Project Information
Center project name: L999
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1794 18043: gap of 100 bp
1804 22424: contig of 4381 bp in length
22425 25244: gap of 100 bp
38095 38194: gap of 100 bp
38195 49220: contig of 11026 bp in length
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/clone_lib="RPC1-11 Human Male BAC"
Wyman, D., Ye, W.J., Zimmer, A. and Zody, M.
Direct Submission
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/note="assembly_fragment"
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                   TITLE
JOURNAL
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                                                                                              COMMENT
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165612 ATGTATTCTCATAATGTGGTCATCATGAACCTCAACAGCTGAACCTGACCCGAGGTGCAG
                                                                                                                                                                                                                                                                                                                                                                            165132 CACCTGCGGACGCTGACCAGCAATCTAAATGAAGTCAGGACCACTTGCACAGATACCCTT 165073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Db 165072 ACCAAACACACAGATGATCTGACCTCCTTGAATAATACCCTGGCCAACATCCGTTTGGAT 165013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DD 164952 AACTTATCAGTGATTATGGAAGAAATGAAGCTAGTAGAAGCTCCAAGCATGGTCAGCTCATC 164893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161 HisLeuargThrLeuThrSerAsnLeuasnGluValargThrThrCysThrAspThrLeu 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101 GlnMetGluAsnIleThrThrIleSerGlnAlaAsnGluGlnAsnLeuLysAspLeuGln 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PheGlnLeuPheGluThrAspIleValAsnIleIleSerAsnIleSerTyrThrAlaHis 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAla 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  221 AsnLeuSerValIleMetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIle 240
                                                                                                                                                                                                                                          1 MetTyrSerHisAsnValValIleMetAsnLeuAsnAsnLeuAsnLeuThrGlnValGln 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181 ThrLysHisThrAspAspLeuThrSerLeuAsnAsnThrLeuAlaAsnIleArgLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81 AlaLysAlaAsnAsnAspThrLeuGluAspMetAsnSerGlnLeuAsnSerPheThrGly
                   700 others
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                                                                                                                       Conservative:
Mismatches:
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                                                                                     Length:
Matches:
                   52660
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                                                                                                                                                                        Gaps:
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a 33537 c 34088 g
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                                                                                                                                                                                                        US-09-763-712A-2 (1-547) x AC016128
                                                                              5.17e-34
1239.00
100.008
100.008
41.738
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Best Local Similarity:
                 48103
                                                                     Alignment Scores:
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DEFINITION

ACCESSION

VERSION KEYWORDS ORGANISM

SOURCE

REFERENCE AUTHORS TITLE JOURNAL REFERENCE

AUTHORS

TITLE JOURNAL

COMMENT

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consists of 20 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
      This is a 'working draft' sequence. It currently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         133090 133189; conclid of 100 bp 133189; gap of 100 bp 133189; gap of 100 bp 141207 141306; gap of 100 bp 141307 141306; gap of 100 bp 141307 141306; gap of 100 bp 141307 141306; gap of 100 bp 141306; gap of 100 bp 156206 162048; contig of 5543 bp in length 156106 156208; contig of 5843 bp in length 162149 162148; gap of 100 bp 162149 165218; contig of 5843 bp in length 165118; contig of 2970 bp in length 165118; contig of 2970 bp in length 165219 165218; contig of 2970 bp in length 167481 167580; contig of 2406 bp in length 167981 169986; contig of 2406 bp in length 170087 1719089; contig of 100 bp 172010 172019; gap of 100 bp 172010 172019; gap of 100 bp 172318 174663; contig of 2246 bp in length 17464 17477; gap of 100 bp 17464 17477; gap of 100 bp 17451; gap of 100 bp 17464 17631; contig of 1508 bp in length 176272 17631; gap of 100 bp 176372 17631; gap of 100 bp 176372 176372; contig of 1501 bp in length 176372 17631; gap of 100 bp 176372; contig of 1551 bp in length
                                                                                                                                                                                                                                                                   65158: gap of 100 bp
81322: contig of 16164 bp in length
81422: gap of 100 bp
98823: contig of 17401 bp in length
                                                                                                                                                                                      24284 24383: gap of 100 bp
24384 46875: contig of 22492 bp in length
                                                                                                                                                                                                                                   ap of 100 bp
contig of 18083 bp in length
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f 17401 bp in length
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110169 122716: contig of 12548 bp in length
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122817 133089: contig of 10273 bp in length
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81433 .98823
/note="assembly_fragment"
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/note="assembly_fragment"
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122817. .133089
/note="assembly_fragment"
133190. .141206
/note="assembly_fragment"
141307. .149050
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/note="assembly_fragment"
24384. .46875
/note="assembly_fragment"
46976. .65058
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65159. .81322
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46976 65058: cont
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Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo sapiens 178,022 genomic DNA of 18pll.3

Le bublished Only in Database (1999)

E thattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission

Lound Chemical Research (RIKBN), Genomic Sciences Center (GSC);
Mitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555,
Japan (E-mail-Hattori@gsc.riken.go.jp, Tel:81-42-778-9923,
Pax:81-42-778-9924,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NOTE: This is a 'working draft' sequence. It currently consists of 20 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be
      HTG 30-MAY-2000
AP000900 178022 bp DNA linear HTG 30-MAY-200
Homo sapiens chromosome 18 clone RP11-683J11 map 18p11.3, WORKING
DRAFT SEQUENCE, 20 unordered pieces.
                                                                                                                                                                       Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Center project name: Humbraffla
Center clone name: RP11-68311
Center clone name: RP11-68311
Sequencing vector: PCR products; 100% of reads
Sequencing vector: PCR products; 100% of reads
Chemistry: Dye-terminator ET-amersham; 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 170357 bases at least 040
Consensus quality: 170357 bases at least 030
Consensus quality: 174322 bases at least 020
Insert size: 176122; sum-of-contigs
Quality coverage: 4.56x in 020 bases; sum-of-contigs
                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      On May 31, 2000 this sequence version replaced gi:6997403
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length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
------ Project Information
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12548 1
10273 1
8017 1
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Homo sapiens DNA, clone:RP11-683J11
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Sequence updated (26-May-2000)
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149151
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 187635)

E Hattori,M., Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Hong sapiens 187,635 genomic DNA of 18pll.3

L Dublished Only in DataBase (2000)

E (bases 1 to 187635)

E Hattori,M., Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

E (bases 1 to 187635)

E Hattori,M., Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

Direct Submission

Submitted (05-JAN-2000) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);

Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:http://App.gsc.riken.go.jp, Tel:al. 2778-9923,

On May 31, 2000 this sequence version replaced gl:6997772.
                                                                                                                                                                                                                                                                              AP001022 187635 bp DNA linear HTG 30-MAY-2000 HOMO sapiens chromosome 18 clone RP11-815L4 map 18p11.3, WORKING DRAFT SEQUENCE, 33 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NOTE: This is a 'working draft' sequence. It currently consists of 33 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be
                                      Center project name: Humbrafild
Center clone name: RP11-8154
Center clone name: RP11-8154
Center clone name: RP11-8154
Center clone name: RP11-8154
Sequencing vector: PCR products; 100% of reads
Sequencing vector: PCR products; 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 167192 bases at least Q40
Consensus quality: 187020 bases at least Q30
Consensus quality: 182105 bases at least Q30
Insert size: 184435; sum-of-contigs
Quality coverage: 4.35x in Q20 bases; sum-of-contigs
                       SerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAla
                                                                                             AsnLeuSerValIleMetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIle
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Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
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Homo sapiens DNA, clone:RP11-815L4.
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* NOTE: This is a 'working draft' sequence. It currently consists of 33 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as * runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence * as soon as it is available and the accession number will be preserved.
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  Conservative:
Mismatches:
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                                            (1-187635)
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Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo sapplens genomic DNA

Published Only in Database (1999)

E. 2 (bases 1 to 188439)

S. Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission

L. Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
1-7-22 Suchiro-Chou, Tsurumi, Ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattorigasc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-845-503-9111, Fax:81-45-503-9170)

On Apr 26, 2002 this sequence version replaced gi:9188470.
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arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence updated (26-May-2000).

* NOTE: This is a 'working draft' sequence. It currently
* consists of 32 contags. The true order of the pieces
* is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105979 106678; gap of 100 bp 106079 113049; contig of 6971 bp in length 113050 113149; gap of 100 bp 113150 113149; gap of 100 bp 113150 113149; gap of 100 bp 119202 119301; gap of 100 bp 119302 119302 126582; contig of 6522 bp in length 119302 126582; contig of 5388 bp in length 126583 126682; gap of 100 bp 132071 132170; gap of 100 bp 137139 137238; gap of 100 bp 137139 137238; gap of 100 bp 137139 137238; gap of 100 bp 143056; tontig of 5817 bp in length 143056 143155; gap of 100 bp 148059; contig of 5484 bp in length 143156 148639; contig of 5484 bp in length 143156 148639; contig of 5484 bp in length
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33890 51010: contig of 17121 bp in length
51011 51110: gap of 100 bp
51111 63558: contig of 12448 bp in length
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contig of 11398 bp in length
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contig of 6072 bp in length
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148740 153086; contig of 4347 bp in length
153087 153186; gap of 100 bp
153187 158921; contig of 5335 bp in length
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59022 163174: contig of 4153 bp
53175 163274: gap of 100 bp
63275 167066: contig of 3792 bp
98716 105978 contig of 106079 113049 contig of 113150 113049 contig of 113010 126683 132070 contig of 132171 137138 contig of 132171 137138 contig of 137239 137239 contig of 148740 153086 contig of 159022 163174 contig of 159022 163174 contig of 15021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17021 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 17022 
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91010 98615; conti
98616 98715; gap of
98716 105978; conti
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163175 163274: gap of
163275 167066: conti
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90909: conf
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75056; cont
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75057 75156:
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84838
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattoriegsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924)
On May 31, 2000_this sequence version replaced gi:6997751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                  HTG 30-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone RP11-839023 map 18p11.3, WORKING
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Mammalla; Eutherla; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                             SerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAla 220
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases I to 18825)
Hattori, M., Ishli, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fullyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Homo sapiens 188,255 genomic DNA of 18pll.3
Published Only in DataBase (1999)
2 (bases I to 188255)
Hattori, M., Ishli, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fullyama, A., Yada, T., Totoki, Y., Matanabe, H. and Sakaki, Y. Direct Submission
                                             Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0.990329 Consensus quality: 171068 bases at least Q40 Consensus quality: 178865 bases at least Q30 Consensus quality: 182445 bases at least Q30 Insert size: 185155; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quality coverage: 4.41x in Q20 bases; sum-of-contigs
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17593 bp in 1
12121 bp in 1
12448 bp in 1
11398 bp in 1
9581 bp in 1
6072 bp in 1
7606 bp in 1
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HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO Sapiens DNA, clone:RP11-839023.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens chromosome 18 clone RPI
DRAFT SEQUENCE, 32 unordered pieces.
AP000939
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51010 contig of
63558 contig of
75056 contig of
84737 contig of
90909 contig of
98615 contig of
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preserved
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AUTHORS
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AP000939
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100 bp

in length in length

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AC114677 182029 bp DNA linear HTG 10-JUN-2002
Mus musculus clone RP24-213K19, WORKING DRAFT SEQUENCE, 10 ordered
pieces.
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Birren, B., Linton, L., Musbaum, C. and Lander, E.
Mus musculus, clone RP24-213K19
                                                                                                                                                                                                                                                                                                                                                              102661 ATGTATTCTCATAATGTGGTCATCATGAACCTCAACAGCAGCTGAACCTGAACCTGACCAGGTGCAG 102720
                                                                                                                                                                                    102840
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                                                                                                     MetTyrSerHisAsnValValIleMetAsnLeuAsnAsnLeuAsnLeuThrGlnValGln
                                                                                                                                                                   GlnArgAsnLeuIleThrAsnLeuGlnArgSerValAspAspThrSerGlnAlaIleGln
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           440
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AC114677.3 GI:21362159
HTG; HTGS_PHASE2; HTGS_DRAFT; HTGS_FULLTOP.
        Mismatches:
Indels:
Gaps:
                                                                      (1-188255)
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        99.60%
40.82%
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          Best Local Similarity:
                       Query Match:
DB:
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148740. .153086
/note="assembly_fragment clone_end:SP6 vector_side:right"
153887. .158921
167067 167166: gap of 100 bp 167067 167120: contig of 2954 bp in length 170221 170220: gap of 100 bp 170221 172430: contig of 2210 bp in length 17233 172530: gap of 100 bp 172431 172530: contig of 3086 bp in length 175599 175698: gap of 100 bp 177191 177218: contig of 1420 bp in length 17719 177218: gap of 100 bp 177219 178531: contig of 1313 bp in length 178532 178631: gap of 100 bp 178532 178631: gap of 100 bp 178532 178631: gap of 100 bp 178632 178653: contig of 1107 bp in length 178632 178957: contig of 1107 bp in length 179958 181064: contig of 100 bp in length 181065 181164: gap of 100 bp in length 181765 182835: contig of 1787 bp in length 182836 183923: contig of 100 bp 183924 185810: contig of 100 bp 183924 185810: contig of 100 bp 185811 185910: gap of 100 bp 18746 188746 188255: contig of 1010 bp in length 187246 188255: contig of 1010 bp in length.
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Matches:
Conservative:
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63659. 75056
/note-"assembly_fragment"
75157. 84737
/note-"assembly_fragment"
84818. 90909
/note-"assembly_fragment"
91010. 98615
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/note="assembly_fragment"
16197. .3789
/note="assembly_fragment"
33890. .51010
/note="assembly_fragment"
51111. .6358
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119302. .126582
/note="assembly_fragment"
126683. .132070
/note="assembly_fragment"
132171. .137138
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143156. .148639
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159022. .163174
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/chromosome="18"
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1. .16096
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1212.00
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* NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. Gaps between the configs are represented as runs of N. The order of the pieces is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

* This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.

* 1 951 contig of 951 bp in length

* 952 1051: gap of 100 bp

* 3807 3906: contig of 2755 bp in length

* 3807 3906: contig of 4803 bp in length
                                               Quality coverage: 8.0 in Q20 bases; agarose-fp
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8710 8809: gap of 100 bp
8810 17263: contig of 8454 bp in length
17264 17363: gap of 100 bp
17364 236938: contig of 19575 bp in length
36939 37938: gap of 100 bp
37039 53226: contig of 16188 bp in length
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69673 89021: contig of 19349 bp in length
89022 89121: gap of 100 bp
89122 128310: contig of 39189 bp in length
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contig of 16188 bp in length
                 Insert size: 181129; sum-of-contigs
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1168.00
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                              Special to 182029)

Special Linton, L., Nusbaum, C., Lander, E., All, A., Allen, N., Anderson, S., Barna, N., Bastlen, V., Bloom, T., Boguslavkly, L., Bukhqalter, B., Brown, A., Campopiano, A., Chang, J., Conkha, Cook, A., Cooke, Y., Cooke, T., Cooke, S., Cooke, P., Dekrellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Ferreira, P., Fitzhugh, M., Graham, L., Grand-Plerre, N., Hagos, B., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C., Kamat, A., Karatas, A., Kells, C., Lakocque, K., Lamazares, R., Landers, T., Lehoczky, J., Levine, R., Marquis, N., Matthews, C., Macdonald, P., Major, J., Marquis, N., Matthews, C., Macathy, M., McBon, P., Margor, J., Marquis, N., Matthews, C., Macathy, M., McBon, P., Major, J., Marquis, N., Melay, C., Nicol, R., Olono, J., Peterson, K., Phunkhan, P., Olonoell, P., O'Donnell, P., O'Bonnell, P., O'Bonnel
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Direct Submission

Direct Submission

Direct Submission

Burnited (10-MAR-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA

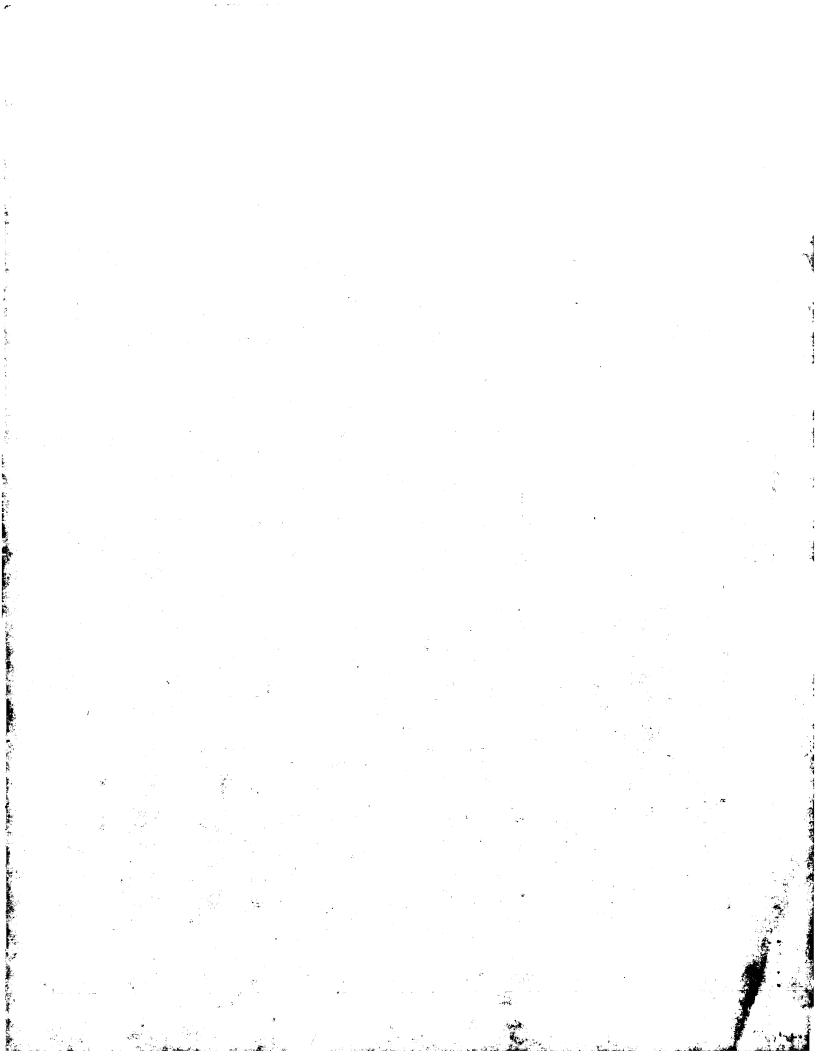
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Submitted (10-JUN-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
On Jun 10, 2002 this sequence version replaced gi:21328559.
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
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Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequencing vector: Plasmid; n/a; 100% of reads Sequencing vector: Plasmid; n/a; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.960731 Consensus quality: 179506 bases at least Q40 consensus quality: 180733 bases at least Q30 Consensus quality: 181050 bases at least Q30 Insert size: 180000; agarose-fp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Web site: http://www-seq.wi.mit.edu
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JOURNAL
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JOURNAL
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JOURNAL
                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
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1 MetTyrSerHisAsnValValIleMetAsnLeuAsnAsnAsnLeuAsnLeuFhrGlnValGln 20
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128411 182029: contig of 53619 bp in length.
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Mismatches:
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                                                                        181 ThrLysHisThrAspAspLeuThrSerLeuAsnAsnThrLeuAlaAsnIleArgLeuAsp
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Search completed: March 21, 2003, 11:12:28 Job time : 4023.46 secs



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GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                  OM nucleic - nucleic search, using sw model
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March 21, 2003, 01:02:25 ; Search time 4292.42 Seconds
(without alignments)
11492.169 Million cell updates/sec US-09-763-712A-1\_COPx\_1\_1695 1695 1 gtcacgaatctgcagcaaga.....cagtactgtcatctgcatta 1695 4109280 2054640 seqs, 14551402878 residues Total number of hits satisfying chosen parameters: Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries IDENTITY\_NUC Gapox 1.0 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Title: Perfect score: Sequence: Scoring table: Searched: Run on:

em\_htg\_other:\* em\_vi:\* em\_htg\_hum:\* em\_htg\_inv:\* em\_htg\_mus:\* em\_htg\_pln:\* em\_htg\_rod:\* em\_htg\_mam:\* em\_htg\_vrt:\* em\_sy:\* em\_htgo\_hum:\* gb\_ro:\*
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9b\_ph:\* em\_in:\* em\_mu:\* em\_un:\* em\_om:\* em\_or:\* em\_ph:\* GenEmbl:\* Database :

Pred. No. is the number of results predicted by chance to have a

em\_htgo\_mus:\* em\_htgo\_other:\*

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

16913 16913 16913 16913 16913 16913 174.0 13135 16913 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 174.0 17	2005 2005 2005 2005 2005 2005 2005 2005		1315 Sequence 1515 Homo sapi 1412 Sequence 1412 Sequence 1412 Sequence 1412 Sequence 1412 Sequence 1413 Sequence 1413 Sequence 1413 Sequence 1413 Homo sapi 1513 Homo sapi 1514 Homo sapi 1657 Homo sapi 1657 Mus muscu 1667 Mus muscu 1667 Mus muscu 1667 Mus muscu 1677 Mus muscu 1677 Mus muscu 1677 Mus muscu 1677 Mus muscu 1677 Homo sapi 1677 Homo sapi 1677 Homo sapi 1677 Homo sapi 1677 Homo sapi 1677 Homo sapi 1678 Homo sapi
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ALIGNMENTS

AB005145 21-NOV-2001 Homo sapiens CL-P1 mRNA for collectin placenta 1, complete cds. Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. Homo sapiens female tissue\_lib:placenta cDNA to mRNA. AB005145 AB005145.1 GI:17026100 RESULT 1
AB005145
LOCUS
DECINITION
ACCESSION
KEYWORDS
SOURCE ORGANISM REFERENCE AUTHORS

Ohtani,K., Suzuki,Y., Eda,S., Kawai,T., Kase,T., Keshi,H., Sakai,Y., Fukuoh,A., Sakamoto,T., Itabe,H., Suzutani,T., Ogasawara,M., Yoshida,I. and Wakamiya,N.

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                                                                                                                             C (bases 1 to 2983)
Ohtani,K.
Direct Submission
Birect Submission
Direct Submission
College,
Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
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Tel:+81-166-68-2393, Fax:+81-166-68-2399)
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Qy 1501	AAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCGGGATAAC 1560	QY	421 CACAAAGATG
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Oy 1621 Db 2222	aacgatttccaatgtgaagacgtcaataacttcatttgcgaaaagacagggagacagta 1680 	ag vo	
Qy 1681 Db 2282	CTGTCATCTGCATTA 1695 	oy og	783 CGGACGCTGA 601 CACACAGATG 
RESULT 2 AX047353 LOCUS DEFINITION ACCESSION VERSION KEYWORDS	_	Qy Db Qy	
SOURCE ORGANISM PEREPENCE	<u></u>	Qy Db	781 TTTACAATAC:           1023 TTTACAATAC:
AUTHORS	Bandman, O., Hillman, J.L., Tang, Y.T., Lal, P., Yue, H., Baughn, M.R., Lu, D.A. and Azimzai, Y. Extracellular matrix and adhesion associated proteins	Qy	841 GGACCCCCTG(           1083 GGACCCCTG
FEATURES Source		Qy	901 CCTGGCCCTG( 
BASE COUNT	/organism="homo sapiens" /db_xref="taxon:9606" /note="Incyte ID No: 4586187CB1" 823 a 628 c 608 g 582 t	QY	
Query Ma Best Loc Matches	Query Match  99.9%; Score 1693.4; DB 6; Length 2641; Best Local Similarity 99.9%; Pred. No. 0; Matches 1694; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	Qy	
Oy 1 Db 243	CAATCTGCAGAACCAAATGTA 	Oy Dp	
Qy 61 Db 303	TCTCATAATGTGGTCATCATGAACCTCAACAACCTGACCTGACCCAGGTGCAGCGAGG 120 	Qy Db	
Qy 121 Db 363	AACCTCATCACGAATCTGCAGGGTCTGTGGATGACACAGAGCTATCCAGCGAATC 180	දු අ	1201 GGCCCCCCCG(1201)
Qy 181 Db 423		. Qy	1261 CCAACCCCGG( 
Qy 241 Db 483		Qy	1321 TGCTACTATT 
301	GCCAACAACGACCCCTGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG 360 	δo q	1381 AAGTCTTCAC 
Qy 361 Db 603	GAGAACATCACCACTATCTCTCAAGCCAACGAGAGACCTGAAAGACCTGCAGGACTTA 420 	Qy	1441 ATGGTAGGGA(           1683 ATGGTAGGGA

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Homo sapiens SRCL mRNA for scavenger receptor with C-type lectin
AB038518
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Nakamura,K., Funakoshi,H., Miyamoto,K., Tokunaga,F., and Nakamura,T.
Nakamura,K., Funakoshi,H., Miyamoto,K., Tokunaga,F., and Nakamura,T.
Molecular cloning and functional characterization of a human scavenger receptor with C-type lectin (SRCL), a novel member of a scavenger receptor family
Blochem. Blophys. Res. Commun. 280 (4), 1028-1035 (2001)
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TSPDYKNWKAGQPDNWGHGHGPGEDCAGLIYAGQWNDFQCEDVNNFICEKDRETVLSS
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Nakamura, K. and Nakamura, T.
Nakamura, K. and Nakamura, T.
Direct Submission

Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medical
School, Division of Blochemistry, Blomedical Research Center; 2-2
yamadaoka, Suita, Osaka 565-0871, Japan
(F-mail: knakamur@onbich.med.osaka-u.ac.jp,
Tel:81-6-6879-3783 (ex. 3783), Fax:81-6-6879-3789)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                 AAGTGGCTGGATGGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAAC 1802
                                                                                                     TGGGGTCATGGCCATGGGCCAGGAGAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGG 1620
                                                                                                                                   209. .2437
/gene="SRCL"
/codon_start=1
/product="scavenger receptor with C-type lectin type
/protein_ia="BAB39147.1"
/db_xref="GI:13365515"
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/db_xref="taxon:9606"
/tissue_lib="Placenta"
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                                          Score 1691.8;
Pred. No. 0;
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Pan, James (US)
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Williams, P. Mickey (US); Wood,
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  Hillan, Kenneth J. (US); Marsters,; Paoni, Nicholas F. (US); Stephan, Watanabe, Colin K. (US); Williams,
                                              Location/Qualifiers
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/organism="Homo sapiens"
/db_xref="taxon:9606"
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Patent: WO 0208284-A 27 31-JAN-2002;
Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone
(US); Gerber, Hanspeter (US); Gerritsen, Mary E. (US); Goddard,
Audrey (US); Godowski, Paul J. (US); Gurney, Austin L. (US);
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J.,
Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
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                                                                      CCCGGCCCTCAGGGCCCTCCTGGCTTCCAGGGCTTCAGGGCACCTTGGGGAGCCTGGG
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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ILSNLQQSVDDTSLAIQRIKNDFQNLQQVFLQAKKDTDWLKERVQSLQTLAANNSALA
KANNDTLEDMNSQLSSFTGQNDNITTISQANEQSLKDLQDLHKDTENRTAVKFSQLEE
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Ohtani,K., Suzuki,Y., Eda,S., Kawai,T., Kase,T., Keshi,H.,
Sakai,Y., Fukuoh,A., Sakamoto,T. and Wakamiya,N.
Direct Submission
Submitted (18-JAN-2002) Katsuki Ohtani, Asahikawa Medical College,
Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido
078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:81-166-68-2393, Fax:81-166-68-2399)
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Mammalia; Eutherla; Rodentla; Sclurognathi; Muridae; Murinae; Mus
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ACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTATTTTTTAGTTG
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Sakai,Y., Fukuoh,A., Sakamoto,T., Itabe,H., Suzutani,T.,
Ogasawara,M., Yoshida,I. and Wakamiya,N.
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GSRGSPGKPGPGPSGDPPGPPGKDGLPGPQGPPGFPGLGGTVGEPRGLPG
LPGVPGMPGPKGPPGPSGAMEPLALQNEPTPASEVNGCPPHWKNFTDKCYYFSLE
                                                                                             KEIFEDAKLFCEDKSSHLVFINSREEQQWIKKHTVGRESHWIGLTDSEQESEWKWLDG
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Molecular cloning of a mouse scavenger receptor with C-type lectin (SRCL)(1), a novel member of the scavenger receptor family alcohim. Biophys. Acta 1522 (1), 53-58 (2001) 21575692 2 (bases 1 to 3291)
                                                  Tobases 1 to 3291)
Nakamura,K. and Nakamura,T.
Nakamura,K. and Nakamura,T.
Direct Submission
Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medical
School, Division of Biochemistry, Blomedical Research Center; 2-2
yamadaoka, Suita, Osaka 565-0871, Japan
(E-mail:knakamura/conbich.med.osaka-u.ac.jp,
Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
Location/Qualifiers
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Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Nus.
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GACAACATTACCACTATCTCACAGGCCAACGAGGCAGAGCCTGAAAGACCTTCAGGACTTA
                        1148 AGGACACTGACCAGCAATCTGAATGATGTTTGGACCACATGCACAGACACCTTGACCAGA
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1 (sites)

Nakamura,K. Funakoshi,H., Miyamoto,K., Tokunaga,F. and Nakamura,T.
Molecular cloning and functional characterization of a human scavenger receptor with C-type lectin (SRCL), a novel member of a scavenger receptor family

Lochem. Blophys. Res. Commun. 280 (4), 1028-1035 (2001)

2 (bases 1 to 4330)

Nakamura,K. and Nakamura,T.
Direct Submission
Submitted (04-DEC-2000) Kenji Nakamura, Osaka University Graduate School of Medicine, Division of Biochemistry, Biomedical Research Center; 2-2 yamadaoka, suita, Osaka 565-0871, Japan (E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783, Fax:81-6-6879-3789)
                                                                                                                                                                                                                                                                                           4330 bp mRNA linear PRI 08-MAR-2001
Homo sapiens SRCL mRNA for scavenger receptor with C-type lectin
AP052103
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                              AACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTA 1680
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Pred. No. 2.2e-291;
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1838. .1843
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S. Koehrer, K., Beyer, A., Mewes, H.W., Well, B. and Wiemann, S. Direct Submission

L. Submitted (12-MAR-2002) MIPS, Am Klopferspitz 18a, D-82152
Martinsried, GERNAN, Molecular Genome Analysis, German Cancer Research Center (DKF2); Email s.wiemann@dkfz-heidelberg.de; sequenced by BMFZ (Blomedical Research Center at the Charite, Berlin/Germany) within the CDNA sequencing consortium of the German Genome Project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This clone (DKFZp547G1215) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further information about the clone and the sequencing project is available at http://mips.gsf.de/proj/cDNA/.
                                                                                                                                                                                                                                                                                                   HSM802985 1886 bp mRNA linear PRI 20-MAR-2002
Homo sapiens mRNA; cDNA DKF2p547G1215 (from clone DKF2p547G1215).
AL713657
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                                 GTGCCTGGACCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCAAG
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/clone_lib="547 (synonym: hf
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                              CCTGGCCCTGCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGC
                                                                                                           CACACAGATGATCTGACCTCCTTGAATAATACCCTGGCCAACATCCGTTTGGATTCTGTT
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                                                                                                                                                        ACATCATTAGCAATATCAGTTACACAGCCCACCACCTGCGGACGCTGACCAGCAATCTAA 562
                                                                                                                                                                  61 ACATCATTAGCAATATCAGTTACACAGCCCACCACCGGGGGGCGCTGACCAGCAATCTAA 120
                                                                                                                                                                                                                                                                                           742
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                                                                                                                                                                                                                                                                                                                                                          AGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCAC 360
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                                                                                                                                                                                                                                                                                                                                                 9; Length 1886;
                                                                                         Indels
                                                                   Score 1251.4; DB 9;
Pred. No. 2.1e-284;
                                   ¥
                                                                                         0; Mismatches
/gene="DKFZp547G1215"
1869
                       /gene="DKF2p547G1215"
                                    δ
                                  445
                                                                 73.88;
99.98;
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                                                                                       Matches 1252;
               polyA_site
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ACO16128 169088 bp DNA linear HTG 09-SEP-2000 Homo sapiens chromosome 18 clone RP11-324G2 map 18, WORKING DRAFT SEQUENCE, 8 unordered pieces.
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Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo sapiens chromosome 18, clone RP11-324G2
                                                                           1522
                                                                                                                1080
                                                                                                                                                         1582
                                                                                                                                                                          ------ Genome Center
Center: Whitehead Institute/ MIT Center for Genome Research
                      GGATCGGCCTCACAGACTCAGAGCGTGAAATGAATGGAAGTGGCTGGATGGGACATCTC
                                                                                            1523 CAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAG
                                                                                                                                                                                                                                   1583 GAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACG
1201 TCAATAACTTCATTTGCGAAAAAGACAGGAGACAGTACTGTCATCTGCATTA 1253
                                                                                                                                                                                                                                                                                                               1643 TCAATAACTTCATTTGCGAAAAAGACAGGAGACAGTACTGTCATCTGCATTA 1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Center clone name: 324_G_2
Center clone name: 324_G_2
Sequencing vector: M13: M77815; 100% of reads
Chemistry: Dye-terminator Big Dye; 100% of reads
Assembly program: Phrap; version 0.960731
Consensus quality: 165522 bases at least Q40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@qenome.wi.mit.edu
------- Project Information
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 178022)

1 Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

1 Lablished Only in DataBase (1999)

2 (bases 1 to 178022)

1 Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

1 Direct Submission

2 Usbmitted (17-029) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555,
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                              165546 AACCTCATCACGAATCTGCAGCGCTCTGTGGATGACACAGCCAGGCTATCCAGCGAATC 165487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DD 165366 GCCAACAACGACCCCGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG 165307
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     121 AACCTCATCACGAATCTGCAGCGGTCTGTGGATGACAAAGCCAGGCTATCCAGCGAATC 180
                                                                                                                                                                                                   241 CTGAAGGAGAAAGTGCAGAGCTTGCAGACGCTGGCTGCCAACAACTCTGCGTTGGCCAAA 300
                                                                                                                                                                                                                                                                                              301 GCCAACAACGACACCCTGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG 360
                                                                                                                                                                                                                                                                                                                                                                                              361 GAGAACATCACCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTA 420
                                                                                                  181 AAGAACGACTTTCAAAATCTGCAGCAGGTTTTTTTTAAAGCCAAGAAGGACACGGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCTTTGAGACGGATATTGTGAACATCATTAGCAATATCAGTTACACAGCCCACCACCTG
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HOMO sapiens DNA, clone:RP11-683J11.
HOMO sapiens
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KEYWORDS
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AP000900
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Db 165606 TCTCATAATGTGGTCATCATGAACCTCAACAACCTGAACCTGACCAGGTGCAGCAGCAGGAGG 165547
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                                                                                                                                                                  NOTE: This is a 'working draft' sequence. It currently consists of 8 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
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Consensus quality: 167248 bases at least Q30 Consensus quality: 167996 bases at least Q20 Insert size: 177000; agarose-fp Insert size: 168388; sum-of-contigs Quality coverage: 6.2 in Q20 bases; agarose-fp Quality coverage: 6.5 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                               1794 18043: gap of 100 bp 18044 22425 contig of 4381 bp in length 22425 22524: gap of 100 bp 22525 38094: contig of 1381 bp in length 22525 38094: contig of 15570 bp in length 38095 38194: gap of 100 bp 49321 49320: contig of 11026 bp in length 49321 49320: gap of 100 bp 66395 66494: gap of 100 bp 66495 91692: contig of 17074 bp in length 91693 91792: gap of 100 bp 66495 91692: contig of 25198 bp in length 120870 120869: gap of 100 bp 100 bp 1208670 120869: contig of 48119 bp in length.
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/clone_lib="RPCI-11 Human Male BAC"
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18044 ..22424
/note="assembly_fragment"
22525 ..38094
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38195 ..49220
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120970. .169088
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clone_end:SP6
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="18"
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COMMENT

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156206. .162048
//note="assembly_fragment"
162149. .165119. /fragment clone_end:SP6 vector_side:left"
//note="assembly_fragment clone_end:SP6 vector_side:left"
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17464 174763: gap of 100 bp
174764 176271: contig of 1508 bp in length
                                                                                        149051 149150: gap of 100 bp 149151 156105: contig of 6955 bp in length 156106 156205: gap of 100 bp 162049 162148: gap of 100 bp 162049 165148: gap of 100 bp 162148: gap of 162149 165118: contig of 2970 bp in length
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                        133090 133189: gap of 100 bp
133190 141206: contig of 8017 bp in length
141207 141306: gap of 100 bp
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Japan (E-mail:hattori@gsc.riken.go.jp,
URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923,
Fax:81-42-778-9934)
On May 31, 2000 this sequence version replaced gi:6997403.
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65158: gap of 100 bp
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                                                                        Homo sapiens chromosome 18 clone RP11-815L4 map 18p11.3, WORKING DRAFT SEQUENCE, 33 unordered pieces. AP001022 GI:8117692
                                                                                                                13764 TCTCTCAGGATGCAACAATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTA 13823
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                                                                                                     TCTCATAATGTGGTCATCATGAACCTCAACAACCTGAACCTGACCCAGGTGCAGCAGAGG 120
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                                                            GTCACGAATCTGCAGCAAGATACCAGCGTGCTCCAGGGCAATCTGCAGAACCAAATGTAT
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HOMO Sapiens DNA, clone:RP11-815L4.
Homo sapiens
                   Score 798;
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                                      Matches 798; Conservative
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NOTE: This is a 'working draft' sequence. It currently consists of 33 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be
                                                                                                                                            Physical
Louraryous merazous incruata; Craniata; Verrebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 187635)

1 Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

1 (bases 1 to 187635)

2 (bases 1 to 187635)

2 (bases 1 to 187635)

3 Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.

Direct Submission

2 Submitted (05-JAN-2000) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC):

Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattori@gsc.riken.go.jp, Tel:81-42-778-9923, Fax:81-42-778-9923,
                                                                                                                                                                                                                                                                                                                         Center clone name: numbratito
Center clone name: RP11-815L4
Sequencing vector: PCR products; 100% of reads
Sequencing vector: PCR products; 100% of reads
Chemistry: Dye-terminator ET-amersham; 100% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 1771020 bases at least 040
Consensus quality: 177020 bases at least 030
Consensus quality: 182105 bases at least 030
Consensus quality: 182105 bases at least 020
Insert size: 184435; sum-of-contigs
Quality coverage: 4.35x in 020 bases; sum-of-contigs
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Center: RIKEN Genomic Sciences Center(GSC)
Center code: RIKEN
Web site: http://hgp.gsc.riken.go.jp/
Contact: hattorigsc.riken.go.jp/
Contact: Pattorigsc.riken.go.jp/
Contact: Project Information
Center project name: Humbraft18
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186446 187635: contig of 1190 bp in length.
Location/Qualifiers
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100.0%; Pred. No. 3.8e-177;
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18296 184841 contig of 1846 bp in length
184942 186345 contig of 1404 bp in length
186446 187635 contig of 1409 bp in length
Sequence updated (26-May-2000).

* NOTE: This is a "working draft' sequence. It currently
* consists of 33 contigs. The true order of the pieces
* is not known and their order in this sequence record is
* arbitrary. Gaps between the contigs are represented as
* runs of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence
* as soon as it is available and the accession number will
* be preserved.
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13719: gap of 100 bp
136810: contig of 5091 bp in length
136910: contig of 5091 bp in length
139925: contig of 3015 bp in length
14025: gap of 100 bp
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Rujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo sapplens genomic DNA.
L bublished Only in Database (1999)
E 2 (bases 1 to 188439)
St Hattori,M., Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Rujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Direct Submission
L Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC):
1-7-22 Suehiro-Chou,Tsurumi-Ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattoriggsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/,
Tel:81-45-503-9111, Fax:81-45-503-9170)
On Apr 26, 2002 this sequence version replaced gi:9188470.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Length 188439;

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Score 798;

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Query Match

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AP000939 188255 bp DNA linear HTG 30-MAY-2000 Homo sapiens chromosome 18 clone RP11-839023 map 18p11.3, WORKING DRAFT SEQUENCE, 32 unordered pieces.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Homo sapiens DNA, clone:RP11-839023.
Homo sapiens
                   0; Mismatches
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CONTE. This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as arbitrary. Gaps between the contigs are represented as Trus of N. but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
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181165 182735: contig of 1571 bp in length

18236 183953: gap of 100 bp

183924 184023: contig of 1088 bp in length

183924 184023: gap of 100 bp

184024 185810: contig of 1787 bp in length
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                                                                                                                                                                                                                     Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattori@go.iken.go.jp, URL:http://App.goc.riken.go.jp, Tel:81-42-778-9923, Pax:81-42-778-994).
On May 31, 2000 this sequence version replaced gi:6997751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be
Fujiyama, A. Yada, T., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fujiyama, A., Yada, T., Totoki, Y., Matanabe, H. and Sakaki, Y. Homo sapiens 188, 255 genomic DNA of 18pll. 3
2 (bases 1 to 188255)
Hattori, M., Ishii, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Pijiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Direct, Submission
                                                                                                                                                                                                                                                                                                                                                                                     Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0.990329 Consensus quality: 17106% bases at least Q40 Consensus quality: 178065 bases at least Q30 Consensus quality: 182445 bases at least Q30 Insert size: 185155; sum-of-contigs
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------ Summary Statistics
Sequencing vector: PCR products; 100% of reads
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
------ Project Information
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Birren, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N.,

Anderson, S., Barra, N., Bastlen, V., Bloom, T., Boguslavkly, L.,

Bukhgalter, B., Drown, A., Camarata, J., Campopiano, A., Chang, J.,

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Raymond, C., Retta, R., Riebeck, M., Riley, R., Rise, C., Rogov, P.,

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Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.

Submitted (10-MaR-2002) Whitehead Institute/MIT Center for Genome
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Mus musculus clone RP24-213K19, WORKING DRAFT SEQUENCE, 10 ordered
pieces.
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 182029)
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DA 103326 TCAGTGATTATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAAT 103385
                                                                                               TCTCTCAGGATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTA 720
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HTG; HTGS_PHASE2; HTGS_DRAFT; HTGS_FULLTOP.
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Research, 320 Charles Street, Cambridge, MA 02141, USA

Birnen, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N.,
Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L.,
Boukhgalter, B., Brown, A., Camarata, J., Campopiano, A., Chang, J.,
Chagaro, B., Choepel, T., Colangelo, M., Collins, S., Collymore, A.,
Cooke, P., DeArellano, K., Diaz, J. S., Dodge, S.,
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Galagan, J., Gardyna, S., Ginde, S., Gordte, W., Graham, L.,
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Vassillacy, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W., Vollang, C., Lander, C., Cambridge, Ma, 02141, USA
On Jun 10, 2002 this sequence version replaced gi:21328559.
All repeats were identified using RepeatMasker:
Smit, A. F. A. & Green, P., (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker:
Center: Whitehead Institute/ MIT Center for Genome Center
Center: Whitehead Institute/ MIT Center for Genome Center
Center: Whitehead Institute/ MIT Center for Genome Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have provided by the submittor.

This sequence will be replaced by the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Center Clohe name: 213_K_19

Sequencing vector: Plasmid; n/s; 100% of reads Sequencing vector: Plasmid; n/s; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of reads Assembly program: Phrap; version 0.960731
Consensus quality: 179506 bases at least Q40
Consensus quality: 180723 bases at least Q30
Consensus quality: 1807023 bases at least Q30
Consensus quality: 180000; agarose-fp
Insert size: 1801129; awm-of-contigs
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTE: This is a 'working draft' sequence. It currently consists of 10 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             37038: gap of 100 bp 53226: contig of 16188 bp in length 53326: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17264 17363: gap of 100 bp
17364 36938: contig of 19575 bp in length
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69572: contig of 16246 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           807 3906: gap of 100 bp 1907 8709: contig of 4803 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9: gap of 100 bp 17263: contig of 8454 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               952 1051: gap of 100 bp 052 3806: contig of 2755 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Web site: http://www-seq.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center project name: L24628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8809:
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36939
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JOURNAL
                                               REFERENCE
                                                                               AUTHORS
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COMMENT

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1931 GTCACAAATCTGCAACAAGATACTAGTGTGCTCCAGGGCAATCTGCAGAGCCAAATGTAT 1872
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1751 AAGAATGATTTCCAAAATCTGCAGCAGGTTTTCCTTCAAGCCAAGAAGGACACCGATTGG 1692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 AACCTCATCACGAATCTGCAGCGGTCTGTGGATGACACAAGCCAGGCTATCCAGCGAATC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAACATCACCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTA 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481 CTCTTTGAGACGGATATTGTGAACATCATTAGCAATATCAGTTACACAGCCCACCACCTG 540
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GTCACGAATCTGCAGCAAGATACCAGCGTGCTCCAGGGCAATCTGCAGAACCAAATGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGAACGACTTTCAAAATCTGCAGCAGGTTTTTCTTCAAGCCAAGAAGGACACGGATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAAGGAGAAAGTGCAGAGCTTGCAGACGCTGGCTGCCAACAACTCTGCGTTGGCCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCAACAACGACACCCTGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG
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69673 89021: contig of 19349 bp in length
89022 89121: gap of 100 bp
89122 128310: contig of 39189 bp in length
18311 128410: gap of 100 bp
128411 182029: contig of 53619 bp in length.
Location/Qualiflers
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Search completed: March 21, 2003, 06:24:31 Job time: 5262.67 secs

Sequence 725, App Sequence 98, Appl Sequence 98, Appl Sequence 3685, App Sequence 613, App

us-10-001-835-98

01161166

Sequence 247,

APP APP APP APP APP APP APP APP APP

Sequence Sequence

US-09-880-107-3685 US-09-980-107-3685 US-09-978-2956-13 US-09-978-697-613 US-09-978-613 US-09-99-832A-613 US-09-99-832A-613 US-10-175-737-331 US-10-175-737-331 US-10-175-738-331 US-10-175-738-331 US-10-175-738-331 US-10-175-738-331 US-10-175-738-331 US-10-175-738-331 US-10-176-913-331 US-10-176-913-331 US-10-176-913-331 US-10-176-913-331 US-10-176-913-331 US-10-176-757-331 US-10-176-757-331 US-10-176-757-331

11486 33226 33226 31590 31590 11797 11797 11797 11797 11797 11797 11797 11797

Sequence Sequence Sequence Sequence

ALIGNMENTS

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Merberg, David
Treacy, Munice
Spaulding, Vikki
INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: CUASSIFICATION: CLASSIFICATION: 
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 198, Application US/09745763
Patent No. US2002065394A1
GENERAL INFORMATION:
MCCOY, John M.
LAVALILE, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Sprunger, Suzanne A.
REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
INFORMATION EDR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2930 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Cambridge
STATE: MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U.S.A. ZIP: 02140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-745-763-198
Sequence 57, Appl
Sequence 57, Appl
Sequence 42, Appl
Sequence 42, Appl
Sequence 26, Appl
Sequence 206, Appl
Sequence 27, Appl
Sequence 33, Appl
Sequence 961, Appl
Sequence 786, Appl
Sequence 6, Appl
Sequence 786, Appl
Sequence 6, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 198, App
Sequence 782, App
Sequence 3946, Ap
                                                                                                                            March 21, 2003, 01:57:56 ; Search time 258.28 Seconds
(without alignments)
5089.177 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      version 5.1.4_p5_4578 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-745-763-198

US-09-924-456-782

US-09-924-340-57

US-09-922-600A-57

US-09-925-302-64

US-09-925-301-42

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US-10-04-1531-961
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US-09-919-497-6
US-09-954-456-762
US-10-044-090-104
                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
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1695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published_Applications_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                              - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                              Gapop 10.0 , Gapext 1.0
                  GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                   length: 0
length: 2000000000
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                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                              Title:
Perfect score:
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                                                                              1;
                                                          Score 1681.4;
Pred. No. 0;
                                                                              0; Mismatches
                             NO: 198
      TOPOLOGY: linear MOLECULE TYPE: CDNA SEQUENCE DESCRIPTION: SEQ ID
STRANDEDNESS: double
                                                          Query Match
Best Local Similarity 99.9%;
Matches 1693; Conservative
                                     US-09-745-763-198
                                                                                                                     598
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Sequence 782, Application US/09954456
Patent No. US20020115057A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Paul
TITLE OF INVENTION: Sets
FILE REFERENCE: 68290-76
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18

PRIOR APPLICATION NUMBER: US/60/234,052
PRIOR FILING DATE: 2000-09-20
PRIOR PLICATION NUMBER: US/60/234,923
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR FILING DATE: 2000-09-25

CURRENT FILING DATE: 2001-09-18 PRIOR APPLICATION NUMBER: US/60/233, PRIOR FILING DATE: 2000-09-18

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PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3946
LENGTH: 6728
                                                                   TYPE: DNA
ORGANISM: Homo sapiens
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SEQ ID NO 57
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Patent No. US20020142981A1
GENERAL INFORMATION:
APPLICANT: Horne, Darci T.
APPLICANT: Scherf, Useph G.
APPLICANT: Scherf, User Cancer
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
FILE REFERENCE: 44921-5028-W0
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/217,054
                                                                                                                                                                                                                                                Length 6728;
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53.0%; Pred. No. 1.2e-19;
tive 0; Mismatches 210;
GCCCTCCTGGCCCATCAGGAGCGGTGG 1237
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Matches 237; Conservative
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APPLICANT: Bejanin, Stephane
TILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.022.REG
CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT APPLICATION NUMBER: US/09/924,340
FRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR APPLICATION NUMBER: US 60/293,574
; OTHER INFORMATION: Genbank Accession No. US20020142981A1 274615
US-09-880-107-3946
                                                                                                                               Length 6728;
                                                                                                                            Query Match 6.5%; Score 111; DB 10; Length 6 Best Local Similarity 53.0%; Pred. No. 1.2e-19; Matches 237; Conservative 0; Mismatches 210; Indels
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PRIOR APPLICATION NUMBER: US 60/299,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
SOFTWARE: JPatent
SEQ ID NO 57
                                                                                                                                                                                                                                                                                                                          LOCATION: 965.1133
FEATURE:
NAME/KEY: POlyA_signal
LOCATION: 1101.1106
FEATURE:
                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: polyA_site
; LOCATION: 1118..1133
US-09-992-600A-57
                                                                                                                                                                                                                                                                         LOCATION: 476..964
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                                                                                                                             LENGTH: 1133
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US-09-925-302-64
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APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.034.DIV
CURRENT APPLICATION NUMBER: 05/09/992,600A
CURRENT FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: 06/9924,340
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR PLING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-05
PRIOR FILING DATE: 2001-06-29
                                                                                                                                                                                                                                        Length 1133;
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                                                                                                                                                                                                                                                                         0; Mismatches 229;
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                                                                                                                                                                                                                                                       Pred. No. 5.6e-20;
                                                                                                                                                                                                                                    6.5%; Score 110.6; 52.9%; Pred. No. 5.6
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                                                                                                                         NAME/KEY: polyA_signal
LOCATION: 1101..1106
NAME/KEY: polyA_site
LOCATION: 1118..1133
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US-09-992-600A-57
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LOCATION: 9
NAME/KEY: F
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LOCATION:
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Length 1133;
                                                            Indels
                                                      0; Mismatches 229;
  DB 9;
6.5%; Score 110.6; DB 9 52.9%; Pred. No. 5.6e-20;
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Patent No. US20020044941A1
GENERAL INFORMATION:
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Best Local Similarity 52.99
Matches 267; Conservative
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RESULT 8
US-09-880-107-3947
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PAl04
CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILIKG DATE: 2001-08-10
PRIOR FILIKG DATE: 2000-03-08
PRIOR FILIKG DATE: 2000-03-08
PRIOR PRIOR APPLICATION NUMBER: 60/124,270
PRIOR PRIOR PRIOR DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
SOFTWARR: Petentin Ver: 2.0
SEQ ID NO 64
LENGTH: 2691
TYPE: DNA
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                                                                                                                                                                                                                                                     OKGANISM: Homo sapiens
FEATURE:
NAME/KEN: 1653
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (2667)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (2667)
OTHER INFORMATION: n equals a,t,g, or c
LOCATION: (2687)
OTHER INFORMATION: n equals a,t,g, or c
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; Sequence 42, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
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Patent No. US20020142981A1
GENERAL INFORMATION:
APPLICANT: Horne, Darci T.
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer FILE REFERENCE: 44921-5028-WO
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Pred. No. 7e-19;
0; Mismatches 228; Indels
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CURRENT FILING DATE: 2001-06-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR PELICATION NUMBER: US 60/237,054
PRIOR PELICATION NUMBER: US 60/237,054
SOFTWARE: PATENTIN VEY: 2.1
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05882
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1694
SOFTWARE: PATENTY OF SEQ ID NOS: 1694
SEQ ID NO 42
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Best Local Similarity 53.5
Matches 274; Conservative
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                                                                                         OTHER INFORMATION: Genbank Accession No. US20020142981A1 274616
                                                                                                                                                                                                 Length 5086;
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; Publication No. US20030040617A9
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA102
; CURRENT APPLICATION NUMBER: US/09/925,299
; CURRENT APPLICATION NUMBER: PCT/US00/05883
; PRIOR APPLICATION NUMBER: PCT/US00/05883
; PRIOR FILING DATE: 2000-03-08
; PRIOR FILING DATE: 1999-03-12
                                                                                                                                                                                                 Query Match 6.3%; Score 107; DB 10; Length 5 Best Local Similarity 51.3%; Pred. No. 1.3e-18; Matches 248; Conservative 0; Mismatches 235; Indels
                                                                                                      NAME/KEY: unsure
LOCATION: (1)..(5086)
OTHER INFORMATION: n = a or c or g or t
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SOFTWARE: PatentIn Ver. 2.0
                                                  ORGANISM: Homo sapiens
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LENGTH: 5145
SEQ ID NO 3947
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                                     TYPE: DNA
                                                                        FEATURE:
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; GENERAL INFORMATION:
    APPLICANT: Rosen et al.
    TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies; TILE REFERENCE: PA102
    CURRENT APPLICATION NUMBER: US/09/925,299; CURRENT FILING DATE: 2001-08-10
    PRIOR APPLICATION NUMBER: PCT/US00/05883
    PRIOR FILING DATE: 2000-03-08
    PRIOR APPLICATION NUMBER: 60/124,270
    PRIOR APPLICATION NUMBER: 60/124,270
    PRIOR FILING DATE: 1999-03-12
    NUMBER OF SEQ ID NOS: 1556
    SOFTWARE: PatentIn Ver. 2.0
    SEQ ID NO 206
    LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                         Length 5145;
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6.3%; Score 107; DB 9;
Best Local Similarity 51.3%; Pred. No. 1.3e-18;
Matches 248; Conservative 0; Mismatches 235.
                                                                                                                                                                                 OTHER INFORMATION: n equals a,t,g, or c NAME/KEY: misc_feature CocATION: (5143)
COCATION: (5143)
US-09-925-299-206
                                                                                                          or
                             or
LOCATION: (4)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: miss_feature
                                                                         LOCATION: (17)

UOTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (5126)
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ORGANISM: Homo sapiens
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Patent No. US20020137081A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT APPLICATION DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL. Program
SEQ ID NO 22
LENGTH: 5432
TYPE: DNA
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                                                                                                                                                                                                                                                                                                Length 5145;
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                                                                                                                                                                                                                                                                                              Query Match 6.3%; Score 107; DB 10;
Best Local Similarity 51.3%; Pred. No. 1.3e-18;
Matches 248; Conservative 0; Mismatches 235;
                         FEATURE:
NAME/KEY: misc_feature
LOCATION: (4)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (17)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (5126)
LOCATION: (5126)
LOCATION: (5126)
LOCATION: (5126)
LOCATION: (5126)
LOCATION: (5127)
                                                                                                                                                                                                                                   ; OTHER INFORMATION: n equals a,t,g, or c us-09-925-299-206
            ORGANISM: Homo sapiens
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APPLICANT: Recipon, Herve
APPLICANT: Recipon, Herve
APPLICANT: Cafferkey, Robert
APPLICANT: Sun, Yongming
APPLICANT: Liu, Chenghua
TITLE OF INVENTION: Compositions and Methods Relating to Breast Specific Genes and
TITLE OF INVENTION: Compositions and Methods Relating to Breast Specific Genes and
TITLE REFERENCE: DEX-0269
FILE REFERENCE: DEX-0269
FILE REFERENCE: DEX-0269
FILE REPERENCE: 2000-11-20
FILE REPERENCE: 2000-11-20
FILE REPERENCE: 2000-11-22
FILE REPERENCE: DEX-0269
FILE REPERENCE: 2000-11-22
FILE REPERENCE: DEX-0269
FILE REPERENCE:
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                                                                                                                                                                                                             Length 5432;
; NAME/KEX: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
US-10-044-090-22
                                                                                                                                                                                                             Score 107; DB 12;
Pred. No. 1.3e-18;
0; Mismatches 235;
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                                                                                                                                                                                                                   6.3%;
51.3%;
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APPLICANT: Salceda, Susana
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US-10-001-887-33
                                                                                                                                                                                                                        Query Match
Best Local Similarity
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##SOLO 964-824A-255

| Sequence 255, Application US/09964824A|
| Patent No. US20020102531A1|
| APPLICANT: Horrigan, Stephen |
| TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Sign |
| TITLE OF INVENTION: Sets |
| FILE REFERENCE: 689230-73 |
| CURRENT FILING DATE: 2001-09-27 |
| PRIOR APPLICATION NUMBER: US/60/236,033 |
| PRIOR APPLICATION NUMBER: US/60/236,032 |
| PRIOR APPLICATION NUMBER: US/60/236,032 |
| PRIOR FILING DATE: 2000-09-28 |
| PRIOR PRIOR PRIOR DATE: 2000-09-28 |
| PRIOR DATE: 2000-09-28
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                                                          TTACAATACTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGG 841
                                                                                                                  837 TCACAGGCCCGAAAGGAGCAACGGGCCCCCCAGGCATCAACGCAAGGATGGGACCCCAG 896
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   0; Mismatches 215; Indels
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Best Local Similarity 52.2%; Pred. No. 1.6e-18;
Matches 235; Conservative 0; Mismatches 215;
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SOFTWARE: PatentIn version 3.0
   Matches 235; Conservative
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US-09-964-824A-255
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LENGTH: 2542
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Sequence 961, Application US/09954531

Sequence 961, Application US/09954531

GENERAL INFORMATION:

TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancer TITLE OF INVENTION: Gene Sets

CURRENT FILING DATE: 2000-09-18

PRIOR FILING DATE: 2000-09-18

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-22

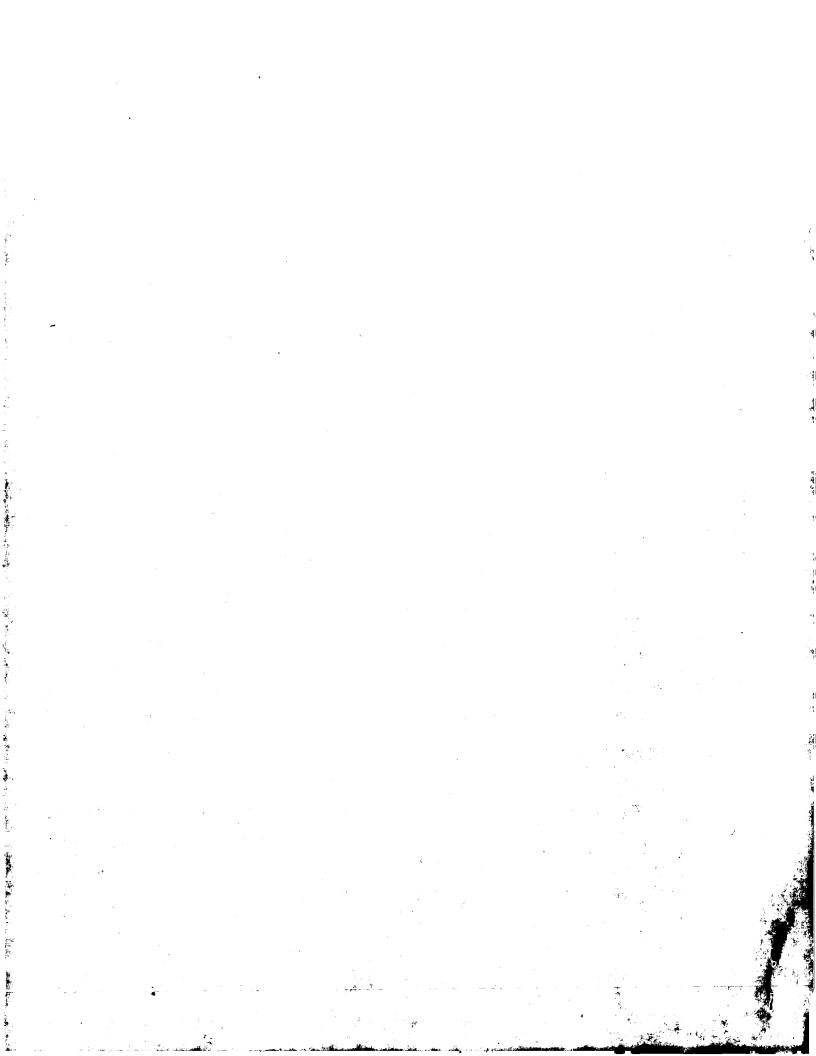
NUMBER OF SEQ ID NOS: 1392

SOUTHWARE: PATENTIN Version 3.0
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                                                                                                                                              795 AGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCC 854
                                                                                         Gaps
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                                                                                      Indels
                           Score 106.8; DB 9;
Pred. No. 1.4e-18;
0; Mismatches 222;
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Pred. No. 1.6e-18;
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                        Query Match 6.3%;
Best Local Similarity 52.9%;
Matches 256; Conservative
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US-09-954-531-961
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US-09-954-531-961
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                                          TGCGGGTGAGAGAGCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGG
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TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cand
TITLE OF INVENTION: Sets
TITLE REPERENCE: 689290-76
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
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1017 AGCCGGGCCCGCAGGCCTTCCTGGTTCTCTGGTCCCCCTGGGAAAGAGGGAGACCAG 1076
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                                                                                                                                   GCCCTCAGGGCCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCC 1081
                                                                                                                                                                                                              1082 CCGGCCCTCAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGG 1141
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PRIOR APPLICATION NUMBER: US/60/235,711
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR FILING DATE: 2000-09-27
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PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR FILING DATE: 2000-09-26
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PRIOR APPLICATION NUMBER: US/60/234,052
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PRIOR FILING DATE: 2000-09-27
NUMBER OF SEQ ID NOS: 2276
SEQ ID NO 786
LENGTH: 5416
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Patent No. US20020115057A1
GENERAL INFORMATION:
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Best Local Similarity 51.1'
Matches 247; Conservative
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US:09-954-456-786
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Result
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Searched:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic - nucleic search, using sw model
                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                 1357.4
677.8
658.4
616.8
559
                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IDENTITY_NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            March 21, 2003, 01:34:06; Search time 2223.7 Seconds (without alignments)
12344.923 Million cell updates/sec
                                                                                                      Query
Match Length DB
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1695
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 80.1
40.0
38.8
36.4
33.0
32.8
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gb_est1: *
gb_est2: *
gb_est2: *
gb_htc: *
gb_est3: *
gb_est4: *
gb_est5: *
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BQ891432
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BQ955927 AGENCOURT
BQ991432 AGENCOURT
BQ934501 AGENCOURT
B1456109 603172765
BQ713873 AGENCOURT
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MR	88	494	482931	AG	MR2-E	BM721855 UI-E-E00-		4-In	MR2-	MR2		\L541116	up3		BF858081 QV1-FT020	BG012097 CM4-GN036	BF854320 MR2-EN009	RC5	BE929813 RC3-GN004	BF854324 MR2-EN009	PU1	W27610 35b6 Human	AA361740 EST71069	AL543	AW379436 CM4-HT024	ST1	UI-M-	UI-E-	UI-E	BB248064 BB248064	BF856923 QV1-FT020	60108924	AW958053 EST370123	803	3	BQ127513 ii60h06.y	BF805750 QV1-CI017	BQ674807 AGENCOURT

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## ALIGNMENTS

	REMARK	CORNAL	TITLE	REFERENCE		ORGANISM	KEYWORDS	ACCESSION VERSION	LOCUS DEFINITION	RESULT 1 BC009162
Email: cgapbs-r@mail.nih.gov Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys cDNA Library Preparation: Life Technologies, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Baylor College of Medicine Human Genome Sequencing Center Center code: BCM-HGSC Web site: http://www.hgsc.bcm.tmc.edu/cdna/	USA NIH-MGC Project URL: http://mgc.nci.nih.gov Contact: MGC help desk	Gene Collection (MGC), Cancer Genemics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,	Direct Submission  Sibrect Submission  Oreginal Control Contro	1 (bases 1 to 3305)	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.	Mus musculus	HTC.	BC009162.1 GI:14714370	BC009162 3305 bp mRNA linear HTC 07-AUG-2002 Mus musculus, Similar to scavenger receptor with C-type lectin,	

556.4

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BASE COUNT
ORIGIN
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Best Local Sim
Matches 1484;
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          CACACAGATGATCTGACCTCCTTGAATAATACCCTGGCCAACATCCGTTTGGATTCTGTT
                                                                                                         GCCAACAACGACACCCTGGAGGATATGAACAGCCAGCTCAACTCATTCACAGGTCAGATG
                                                                                                                                                                                                                                                                                                                                CGGACACTGACCAGCAATCTGAATGATGTTAGGACCACATGCACAGACACCTTGACCAGA
                                                              CGGACGCTGACCAGCAATCTAAATGAAGTCAGGACCACTTGCACAGATACCCTTACCAAA
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through the I.M.A.G.I
Series: IRAK Plate: 5
This clone was select
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be fo through the I.M.A.G.E. Consortium/LLML at: http://lmage.llnl.gov Serles: IRAK Plate: 5 Row: h Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu,
Yoon, V.S., Kowis, C.R., Lawrence,
Richards, S., Gibbs, R.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              passed the following analysis
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="IMAGE:2811487"
/tlssue_type="Mammary tumor. W
Old, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
/lab_host="DHIOB"
/note="Vector: pCMV-SPORT6"
/note="Vector: 760 g 757 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.1%;
87.6%;
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Pred. No. 0;
0; Mismatches
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 CCATCATCCATATTA
                                                 AATGACTTCCAGTGTGATGAAATCAATAACTTCATTTGTGAGAAGGAAAGGGAGGCAGTA
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5', mRNA sequence.
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EST.
house mouse.
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Tissue Procurement: Susan L. Sullivan, PhD.
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national Institutes of Health, Mammalian Gene Collection
Unpublished (1999)
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1 (bases 1 to 957)
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/clone="IMAGE:6313500"
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/clone="Organ: Olfactory epithelium; Vector:
/note="Organ: Olfactory epithelium; Vector:
pCMV-SPORT6.1.ccdb; Site_1: EcoRV; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.2 kb. Constructed by ResGen, Invitrogen Corp. Note: this a NIH_MGC Library."

a 269 c 258 g 169 t 1 others
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National Institutes of Health, M
Unpublished (1999)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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High quality sequence stop: 632.
Location/Qualifiers
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Tissue Procurement: Mark Maconochie,
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                                                 /db_xref="taxon:10090"
/clone="IMAGE:6332754"
/clone_lib="NIH_MGC_130"
/note="Organ: otocysts; Vector: pCMV-SPORT6.1.ccdb;
Site_1: EcoRV; Site_2: NotI; Cloned unidirectionally
                                /lab_host="DH10B (phage-resistant)"
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                                           CAGGNCAGGGATGGACTCCCTGGGCCCTCAGGGNC
                                                                                                TTCCCCTGGGAAGCCCGGCCCTCAGGGCCCCAGTGGGGACCCAGG --CCCCCCGGGCCCA 1062
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                                                                CCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCC
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                                                                                                                                                                            GAGAGCCTGGTCCACCTGGCCCTGCGGGTGAGAGGGGCCACAATTGGACCAGTCGGCCCTC
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a 250 c 244 g 163 t 6 others
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Pred. No. 1.3e-150;
0; Mismatches 119;
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Best Local Sim
Matches 743;
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TITLE
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                                                                           ACA-GGTCAGATGGAGAACATCACCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGA 407
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CCTTCAGGACTTACACAAGGATACAGAAAATAGAACAGCTGTCAAGTTCAGCCAACTTGA
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                                                           ACAGGGTCAGATGGACAACATTACCACTATCTCACAGGCCAACGAGCAGAGCCTGAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Mark Maconoch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA Library Preparation: ResGen, Invitrogen Corp cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov column: 03 High quality sequence stop: 352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae
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BQ934501
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/clone="IMAGE:6330794"
/clone="IMAGE:6330794"
/clone="NH_MGC_130"
/clone="Origin of the property of the primer: Oligo dT. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is NIH_MGC Library."
a 225 c 205 g 172 t
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Pred. No. 2.1e-140;
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Maconochie,
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                                                                                                                                                      Email: Cgapbs r@mail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov

Plate: LLAM11636 row: b column: 17

High quality sequence stop: 730.
                                                                                                                                                                                                                                                                                Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                       NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection
                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                        mRNA sequence.
BI456109
BI456109.1 GI:15246765
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603172765F1 NCI_CGAP_Mam5 Mus
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1 (bases 1 to 906)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                  house mouse
                                                                                                                                              quality sequence stop:
Location/Qualifiers
              Site_
                                   /clone_lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross
/dev_stage="7 months"
/lab_host="DH10B"
                                                                                  /organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:5251888"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: cgapbs-r@mail.nlh.gov
Tissue Procurement: Susan L. Sullivan, PhD.
Tissue Procurement: Susan L. Sullivan, PhD.
cDNA Library Preparation: ResGen, Invitrogen Corp
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health,
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/note="Organ: olfactory epithelium; Vector: olfac
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/clone_lib="NIH_MGC_129"
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collegen
                                                                                                                                                                                                                                                                                                                                          http://image.llnl.gov
Plate: LLCM2377 row: c column:
High quality sequence stop: 656.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bloscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
          /tissue_type="epidermoid carcinoma, cell line"
/lab_host="DHIOB (phage-resistant)"
/note="Organ: salivary gland; Vector: pOTB7; Site_1: XhoI;
Site_2: EcoRI; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using ZAP-CDNA
synthesis kit (Stratagene) and Superscript II RT (Life
Technologies). Note: this is a NIH_MGC Library."

16 a 148 c 167 g 137 t
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1 (bases 1 to 511)

Dias Neto, E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
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QV1-CI0173-071100-464-c02 CI0173 Homo
BF805750
BF805750.1 GI:12134739
EST.
Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the Project. This entry can be seen in
                                                                                Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 and
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                             Contact: Simpson A.J.G.
                                                                                                                                                                                  Shotgun sequencing of the human transcriptome with ORF
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                                                                    B0127513 581 bp
ii60h06;yl Melton Normalized Mixed
musculus cDNA clone IMAGE:5946107 5
CSR2.; mRNA sequence.
B0127513
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
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                                                        BQ127513.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note-"Organ: colon_ins; Vector: puc18; Site_1: SmaI; Site_2: SmaI, A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196.716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
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/db_xref="taxon:9606"
/clone_lib="CI0173"
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d Mouse Pancreas 1 N1-MMS1 Mus
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                                                                                                                                                                                                     1 TCAACAACCTGTACCTACCCCAGGTTCAGCAGAGGAACCTTATCTCAAATCTGCAGCAGT
                                               AGGTTTTTCTTCAAGCCAAGAAGGACACGGATTGGCTGAAGGAGAAAGTGCAGAGCTTGC
                                                                                                 CTGTGGATGACACAAGCCTGGCCATCCAGCGAATTAAGAATGATTTCCAAAAATCTGCAGC
AGGTTTTCCTTCAAGCCAAGAAGGACACCGATTGGCTAAAGGAAAAAGTACAGAGCTTGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: dmelton@biohp.harvard.edu
Library was constructed by Dr. Douglas Melton DNA sequencing l
Washington University Genome Sequencing Center This clone is
available royalty-free through LLNL; please contact the IMAGE
consortium (info@image.llnl.gov) for further information
Seq.primer: -40RP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Endocrine Pancreas Consortium
Harvard University, Howard Hughes Medical Institute
Dept of Molecular and Cellular Biology, 7 Divinity Ave,
MA 02138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (2000)
Other_ESTs: ii60h06.x1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1
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                                                                                                                                                                                                                                                                                                                                                                                                                         fractionation. Libraries were amplified once on solid support and plasmid DNA from each library was prepared and mixed in equal amounts. The mixed library DNA was normalized by method #4 from Bonaldo, Lennon, and Soares 1996 Genome Research 6:791-806; 0.5 microgram single-stranded mixed library plasmid DNA was mixed with 5 micrograms PCR product representing mixed library inserts and hybridized to an Ecot of 6. Single-stranded (unhybridized) plasmids were isolated by hydroxyapatite chromatography and used to make this library."

89 a 159 c 114 g 119 t
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N1-MMS1"
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libraries representing EI0.5/12.5 pancreatic bud, E16.5
pancreas, newborn pancreas, adult pancreas, and adult
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/db_xref="taxon:10090"
/clone="IMAGE:5946107"
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                               segref@genoscope.cns.fr,
                                                                                                      /note="Organ: placenta; Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-Oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cloned into the Not I and Eco RV sites of the pCMVSPORT 6 vector. Library was constructed by Life Technologies. Contact : Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville , Maryland 20850, USA Fax : (1) 301 610 8371 Email : http://eilibrary.com/sites/filiang@lifetech.com/URL :
                                                                       http://fulllength.invitrogen.com"
221 c 217 g 290 t 1
                                                                                                                                                                                                                                                                            /clone="CSODE005YH04"
/clone_lib="LTI_FL002_PL1"
/lab_host="DH10B"
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/db_xref="taxon:9606"
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28.0%;
96.7%;
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 Score 475.4; DB 9; Pred. No. 1.1e-105;
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                   9;
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                                                                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM9128 row: m column: 13
High quality sequence stop: 580.
                                                                                                                                                                                                                                                                                   Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                              NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
Unpublished (1999)
                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D
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(bases 1 to 580)
        /strain="FVB/N"
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                                                                       /organism≖"Mus musculus
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months,
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Local Similarity
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                                                             AGATGGTAGGGAGAGAGCCACTGGATCGGCCTCACAGACTCAGAGCGTGAAAATGAAT
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Site_2: NotI; Cloned unidirectionally. Primer: Oligo
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
a 153 c 161 g 107 t
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Assessment of gene expression patterns metastasis using a 19,200 element cDNA Unpublished (2000) Contact: John Quackenbush AW958053 STATES AW958053 AW958053 1 (bases 1 to 552)
Hegde,P., Qi,R., Abernathy,K., Dharap,S., Gaspard,R.,
,I.E., Saeed,A.I., Sharov,V., Lee,N.H., Yeatman,T.J. Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Quackenbush, J. Homo sapiens AW958053.1 Institute GI:8147736 for Genomic Research 2 bp MAGE Homo mRNA sapiens microarray in a model linear cDNA, of. Euteleostomi; mRNA sequence. , Gay,C., and tumor HOLt

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                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
1 (bases 1 to 601)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collect
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Rob
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortiu
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BE290299.1
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Email: johnq@tigr.org
Plate: 115
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/db_xref="taxon:9606"
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                                                                                                                                 AGAAA-TTTTGAAGATGCTAAGCTTTTCTGTGAAGACAAATCTTCCCCATCTCGTTTTCAT
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Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
plate: LLAM8516 row: k column: 12
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NIH*
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/clone_lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross tissue"
/dev_stage="7 months"
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/strain="C57BL/6J"
/db_xref="taxon:10090"
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GCAGAGAATAGAACAGCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAG
                                                            ACCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACACAAAGAT 429
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtm12.pl?tl=QVI&t2=QV1-FT0201-021100-453-e01&t3=2000-11-02&t4=1)
Seq.primer: puc 18 forward
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tissue mRNA and cDNA amplification were performed under low stringency conditions." 93 c 109 g 135 t
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/dev_stage="Adult"
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/db_xref="taxon:9606"
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DEFINITION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh
,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,Y., Tanka,T., Matsuura
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RI
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa
Tel: 81-45-503-9222
Fax: 81-45-503-9216
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Okazaki,Y., Okido,T., Saito,R., Sakai,C., Sakai,K., Sa
,D., Shibata,K., Shinagawa,A., Shiraki,T., Sogabe,Y.,
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                                                                                     cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Grougenomic Sciences Center and Genome Science Laboratory in
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Computational Analysis of Full-Length Mouse cDNAs Compared with
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RIKEN integrated sequence analysis (RISA) system--384-format RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome 10 (11), 1757-1771 (2000)
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Muramatsu,M. and Hayashizaki,Y.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Y. and Hayashizaki, Y
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/dev_stage="7 days neonate"
/lab_host="DH10B"
/note="Site_1: SalI; Site_2: BamHI; cDNA library was
/note="Site_1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer [5' GAGAGAGAGAGGATCCAAGAGCTCTTTTTTTTTTTTTTVN 3'], cDNA was
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/clone_lib="RIKEN full-length enriched, 7 days neonate
cerebellum"
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## ALIGNMENTS

	AUTHORS	REFERENCE			ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	AB005145	RESULT 1
Sakai,Y., Fukuoh,A., Sakamoto,T., Itabe,H., Suzutani,T.,	Ohtani, K., Suzuki, Y., Eda, S., Kawai, T., Kase, T., Keshi, H.,	1	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	Homo sapiens female tissue_lib:placenta cDNA to mRNA.		AB005145.1 GI:17026100	AB005145	Homo sapiens CL-P1 mRNA for collectin placenta 1, complete cds.	AB005145 2983 bp mRNA linear PRI 21-NOV-2001		

Ogasawara, M., Yoshida, I. and Wakamiya, N.

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J. Biol. Chem. 276 (47), 44222-44777
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Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Department of Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa
Hokkaido 078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:+81-166-68-2393, Fax:+81-166-68-2399)
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GSRGSPGKPGPPGPPGPPGPPGLALQNBETPPAPEDNGCPPHWKNETDKCYYFSVE
LPGVPGMPGPKGPPGPGPSGAVVPLALQNBETPPAPEDNGCPPHWKNETDKCYYFSVE
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CCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGC
                                                                                      CCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAG
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                                         GGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCCAGTGGGGAC
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Extracellular matrix and adhesion-associated Patent: WO 0068380-A 39 16 NOV-2000; Incyte Genomics, Inc. (US)
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Location/Qualifiers
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/db_xref="taxon:9606"
/note="Incyte ID No: 4586187CB1"
/note="Incyte ID No: 4586187CB1"
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                                      School, Division of Biochemistry, Biomedical Research yamadaka, Suita, Osaka 565-0871, Japan (E-mail:knakamur@onbioh.med.osaka-u.ac.jp, Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
                                                                                        Value 1 to 3058)

Nakamura, K. and Nakamura, T.

Direct Submission

Submitted (18-FEB-2000) Kenji Nakamura,
                                                                                                                                              Biochem. Biophys. Res. Commun. 21092718
                                                                                                                                                                                                                                                                                                                   Homo sapiens SRCL mRNA type I, complete cds. AB038518
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Mammalia; Eutheria; Primates; Catarrhini;
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/organism="Homo
                           Location/Qualifiers
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                                  AAGGGACAGAAAGGAGAAGGGGGGAGCCTGGACCTGGCCCTGCGGGTGAGAGAGGC
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KANNDTLEDMNSQLNSTGQMENITTISQANEQNLKDLQDLHKDLARITAIKFNQLEE
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RLDSVSLRMQQDLMRSRLDTEVANLSVIMEEMKLVDSKHGQLIKNFTILQGPPGPRGP
RGDRGSGGPPGTGNKGQKGEKGEPGPGPAGEEGFIGPAGPPGEPGKEGLAG
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KEIFEDAKLFCDBKSSHLVFINTREEQQMIKKQNVGRESHWIGLTDSEREMEMKWLDG
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Compositions and methods for the dia disorders involving anglogenesis Patent: WO 0208284-A 27 31-JAN-2002; Genentech, Inc. (US); Baker, Kevin (US); Gerber, Hanspeter (US); Gerr
                                                                     Baker,K.P., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A., Goddowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J., Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
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Hillan, Kenneth J. (US);
Paoni, Nicholas F. (US)
Watanabe, Colin K. (US);
I. (US)
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/db_xref="taxon:9606"
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AL713657.1 G
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Clone from S. Wiemann, Molecular Genome Analysis, German Ca
Clone from S. Wiemann, Molecular Genome Analysis, German Ca
Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by BMFZ (Biomedical Research Center at the Charit
Berlin/Germany) within the cDNA sequencing consortium of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This clone (DKF2p547G1215) is available at the RZPD in Berlin Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 140 Berlin-Charlottenburg, GERMANY: Email: clone@rzpd.de Further
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Submitted (12-MAR-2002) MIPS,
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/tissue_type="brain"
/clone_lib="547 (synonym: h
DH10B; sites NotI + SalI"
/dev_stage="fetal"
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DSKHGQLIKHTTLIQGPGPRGPRGDKGSQGPEPGTCNMGQKGEKGEPGPGPAARE
DIGPAGPPGERGGKGSKGSQGPKGSRGSPGKPGPQGSSGDPGPPGKEGLPGPQGP
/gene="DKFZp547G1215"
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PEDNGCPPHMKNFTDKCYYFSVEKEIFEDAKLFCEDKSSHLVFINTREEQQWIKKQMV
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/protein_id="CAD28466.1"
/db_xref="GI:19584340"
                                                                                                                                                                                                                                                                                                                                                  musculus"
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/note="similarity to
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/db_xref="taxon:9606"
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Sakai,Y., Fukuoh,A., Sakamoto,T., Itabe,H.,
Ogasawara,M., Yoshida,I. and Wakamiya,N.
CDNA cloning of mouse CL-P1 gene
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Submitted (18-FEB-2000) Kenji Nakamura, Osaka Uni
School, Division of Biochemistry, Biomedical Rese
yamadaoka, Suita, Osaka 565-0871, Japan
(E-mail:knakamur@onbich.med.osaka-u.ac.jp,
Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
                                                                                                                                                                                                                                                                                                                                             Nakamura, K., Funakoshi, H., Tokunaga, F. and Nakamura, 7 Molecular cloning of a mouse scavenger receptor with (SRCL)(1), a novel member of the scavenger receptor f Biochim. Biophys. Acta 1522 (1), 53-58 (2001)
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77 . .:
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                                                                                                                                                                                                                                                                               Submitted (04-DEC-2000) Kenji Nakamura, Osaka University Gradu School of Medicine, Division of Biochemistry, Biomedical Resea Center; 2-2 yamadaoka, suita, Osaka 565-0871, Japan (E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783,
                                                                                                                                                                                                                                                                                                                                                           2 (bases 1 to 4330)
Nakamura, K. and Nakamura, T.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nakamura, K., Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T. Molecular cloning and functional characterization of a human scavenger receptor with C-type lectin (SRC1), a novel member of a scavenger receptor family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens SRCL mRNA type II, complete cds. AB052103
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/codon_start=1
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/protein_id="BaB39148.1"
/db_xref="q1:13365553"
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/db_xref="taxon:9606"
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BASE COUNT
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                                                                                                                                                 CCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGC
                                                                                                                                                                                                                                 GGCCCCAAAGGCTCCCGTGGTTCCCCTTGGGAAGCCCCGGCCCTCAGGGCCCCCAGTGGGGAC
                                                                                                                                                                                                                                                                                                                                 CCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAG
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                                                                                                  CCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGC
                                                                                                                                                                                                      GGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCCGGCCCTCAGGGCCCCCAGTGGGGAC
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Baldwin, J., Barna, N., Beckerly, R., Boguslavkiy, L., Boukhgalter, B.,

Brown, A., Castle, A., Colangelo, M., Collins, S., Collymore, A.,

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Ferreira, P., FitzHugh, W., Forrest, C., Funke, R., Gage, D.,

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Howland, J.C., Johnson, R., Jones, C., Kann, L., Karatas, A., Klein, J.,

Lehoczky, J., Lieu, C., Locke, K., Macdonald, P., Marquis, N.,

McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Meldrim, J.,

McEwan, P., McGurk, A., McKernan, K., McLaughlin, J., Meldrim, J.,

Peterson, K., Pollara, V., Riley, R., Va, Santos, R., Severy, P.,

Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J.,

Tesfaye, S., Tirrell, A., Vassiliev, H., Vo, A., Wheeler, J., Wu, X.,

Wyman, D., Ye, W. J., Zimmer, A. and Zody, M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (20-NOV-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Sep 9, 2000 this sequence version replaced gi:6649269.
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
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SEQUENCE, 8 unordered pieces.
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Birren, B., Linton, L.,
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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                                                                                                                  Center project name: L999
Center clone name: 324_G_2
Center clone name: 324_G_2
Center clone name: 324_G_2
Center clone name: 324_G_2
Center clone name: M13; M7815; 100% of reads
Sequencing vector: M13; M7815; 100% of reads
Chemistry: Dye-terminator Big Dye; 100% of reads
Assembly program: Phrap; version 0.960731
Consensus quality: 165522 bases at least Q40
Consensus quality: 167528 bases at least Q30
Consensus quality: 167996 bases at least Q20
Insert size: 177000; agarose-fp
Insert size: 163888; sum-of-contigs
Quality coverage: 6.5 in Q20 bases; agarose-fp
Quality coverage: 6.5 in Q20 bases; sum-of-contigs
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NOTE: This is a 'working draft' sequence. It currently consists of 8 contigs. The true order of the pieces is not known and their order in this sequence record in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
------ Project Information
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arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will
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49221 49320: gap of 100 bp
49321 66394: contig of 17074 bp in length
66395 66494: gap of 100 bp
66495 91692: contig of 25198 bp in length
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17944 18043: gap of 100 bp
18044 22424: contig of 4381 bp in length
22425 22524: gap of 100 bp
22525 38094: contig of 15570 bp in length
38095 38194: gap of 100 bp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-Chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japa (E-mail:hattoriégsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (17-DEC-1999) Masahira Hattori,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direct Submission
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2 (bases 1 to 188439)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujlyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
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/chromosome="18"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       , 2002 this sequence version replaced gi:9188470 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
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99.6%;
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                           Score 488.8; DB 9;
Pred. No. 5.8e-103;
0; Mismatches 2;
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                                                                                                                                                                                                                                                                            Length 188439;
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Birren,B., Linton,L., Nusbaum,C. and Lander,E.
Homo sapiens chromosome 11, clone RP11-179K3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HTG;
                                                                                                                                                                                                                      Submitted (28-FEB-2000) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /μντι υρ υΝΑ linear HTG 28-FEB-2000 Homo sapiens chromosome 11 clone RP11-179K3 map 11, LOW-PASS SEQUENCE SAMPLING.
                                                                                                                                                                                                                                                                                          Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HOMO
                                                                                                            http://ftp.genome.washington.edu/RM/RepeatMasker.html
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                                                                                                                                                                    repeats were identified using RepeatMasker: t, A.F.A. & Green, P. (1996-1997)
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Contact: sequence_submissions@genome.wi.mit.edu
                             Web site: http://www-seq.wi.mit.edu
                                                    Center: Whitehead
Center code: WIBR
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1 to 71044)
                                                                                  Institute/ MIT Center for Genome Research
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sequencing reads that have not been assembled into contigs. Runs of N are used to separate the reads and the order in which they appear is completely arbitrary. Low-pass sequence sampling is useful for identifying clones that may be gene-rich and allows overlap relationships among clones to be deduced.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               However, it should not be assumed that this clone will be sequenced to completion. In the event that the record is updated, the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOTE: This record contains 90 individual sequencing reads that have not been asse
                                                                                                                                                                                                                                                                                14196 144881: contig of 686 bp
14882 14981: gap of 100 bp
14882 14981: gap of 100 bp
15675 15774: gap of 100 bp
15675 156461: contig of 693 bp in
16461 16560: gap of 686 bp in
16561 17250: cont':
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Center clone name: 179_K_3
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5409: contig of 6
10 5509: gap of 100
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4 6287
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18 5409: contia ~ 100
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2284: contig of 6
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5 22017: contig of 6
8 22117: gap of 10
8 22815: contig of 6
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ub: gap of

3851: cor
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                                                                                                                                  7/21: gap of 20425: cont
                                                                                  21224: co
                                                                                                                                                                                                     350: gap of 100 bp
18040: contig of 690 bp
1140: gap of 100 bp
18836: contig of 696 bp
936: gap of 100 bp
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3851: contig of 695 bp in
31: gap of 100 bp
4627: conti
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73 49772: gap of 693 bp
66 50565: gap of 100 bp
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19 42608: contig of 690 bp
19 42708: gap of 100 bp
2708: gap of 691 bp
2708: gap of 691 bp
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39449; contig of 686 bp
50 39549; gap of 100 bp
40236; contig of 687 bp
37 40336; gap of 100 bp
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47336: contig of 691 bp
47436: gap of 100 bp
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45750: contig of 684 bp
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36292: contig of 706 bp
6392: gap of 100 bp
37095: contig of 703 bp
7195: gap of 100 bp
37872: config of 677 bp
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52062: cont
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48899: contig of 676
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29943: contig of 698
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27563: contig of 689
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28355: contig of 692
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JOURNAL REFERENCE
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                                                                                                                                                                   AUTHORS
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Direct Submission
Direct Submission
Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555,
                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 178022)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 178,022 genomic DNA of 18p11.3
Published Only in DataBase (1999)

2 (bases 1 to 178022)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   178022 bp DNA linear HTG 30-MAY-200
Homo sapiens chromosome 18 clone RP11-683J11 map 18p11.3, WORKING
DRAFT SEQUENCE, 20 unordered pieces.
                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                         HTGS_PHASE1; HTGS_DRAFT. sapiens DNA, clone:RP11-683J11.
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COMMENT

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Sequence updated (24-Dec-1999)
Sequence updated (26-May-2000).
* NOTE: This is a 'working draft' sequence. It currently
* NOTE: This is a 'working draft' sequence It currently
* consists of 20 contigs. The true order of the pieces
* is not known and their order in this sequence record is
* arbitrary. Gaps between the contigs are represented as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOTE: This is a 'working draft' sequence. It currently consists of 20 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Japan (E-mail:hattori@gsc.riken.go.jp,

URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923,

Fax:81-42-778-9924)

On May 31, 2000 this sequence version replaced gi:6997403.
                                                                                                                                                                                   * runs of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence
* as soon as it is available and the accession number wil
* be preserved.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chemistry: Dye-terminator ET-amersham; 100% (Assembly program: Phrap; version 0.990329 consensus quality: 161944 bases at least Q40 Consensus quality: 170357 bases at least Q30 Consensus quality: 174322 bases at least Q20 Insert size: 176122; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Center project name: HumDraft18 Center clone name: RP11-683J11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: hattori@gsc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Center code: RIKEN
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                                      .422: gap of 100 bp
98823: contig of 17401 bp in
9923: gap of 100 bp
110068: contig of 11145 bp in
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65058: contig of 18083 bp in
188: gap of 100 bp
81322: contig of 16164 bp in
                                                                                                                                              383: gap of 100 bp
46875: contig of 22492 bp in
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                .22716:
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                                                                                             and Chemical Research (RIKEN), Genomic Sciences Center (GSC) Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-85 Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924) On May 31, 2000 this sequence version replaced gi:6997772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AP001022 187635 bp DNA linear HTG 30-MAY-2000 Homo sapiens chromosome 18 clone RP11-815L4 map 18p11.3, WORKING DRAFT SEQUENCE, 33 unordered pieces.
                                                                                                                                                                                                                                                                                                                                          Mammalia; Eutheria; Primates; Catarrhini; Hominid 1 (bases 1 to 187635)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hor Fujlyama,A., Yada,T., Totoki,Y., Watanabe,H. and Homo sapiens 187,635 genomic DNA of 18p11.3
                                                                                                                                                                                                                      Submitted (05-JAN-2000) Masahira Hattori, The Institute of Physical
                                                                                                                                                                                                                                                           Published Only in DataBase (2000)

2 (bases 1 to 187635)

Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens DNA, clone: RP11-815L4.
                                                                                                                                                                                                                                               Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AP001022.2 GI:8117692
Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
                                       Center: RIKEN Genomic Sciences Center(GSC)
Center code: RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HTGS_PHASE1;
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Pred. No. 1.6e-99;
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179887 181579 182996 184942 186446 166401 168681 171371 54437 66867 77950 87899 99611 107374 113290 176196 177991 144333 161985 149003 136911 21433 42173 21332 contig of
42072 contig of
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54336 contig of
77849 contig of
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77987 contig of
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113189 contig of
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182895 contig of
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112330 bp
112330 bp
11612 bp
7663 bp
57810 bp 9849 11612 7663 'n in in length length

\* as soon as it is available and the accession number wi \* be preserved.

\* 1 21332: contig of 21332 bp in length

\* 21433 21432: gap of 100 bp

\* 21433 21432: gap of 100 bp

\* 42073 42172: contig of 20640 bp in length

\* 42073 42172: gap of 100 bp

\* 42173 454336: contig of 12164 bp in length

\* 54337 54436: gap of 100 bp

\* 54437 66766: contig of 12130 bp in length

\* 66767 66886: gap of 100 bp

\* 66867 77849: contig of 12330 bp in length

\* 77850 77949: gap of 100 bp

\* 77950 87798: contig of 9849 bp in length

\* 87799 87898: gap of 100 bp

Sequence updated (26-May-2000).

\* NOTE: This is a 'working draft' sequence. It currently

\* consists of 33 contigs. The true order of the pieces

\* is not known and their order in this sequence record is

\* arbitrary. Gaps between the contigs are represented as

\* runs of N, but the exact sizes of the gaps are unknown.

\* This record will be updated with the finished sequence

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FEATURES
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181479 181578: gap of 100 bp
181579 182895: contig of 1317 bp
182896 182995: gap of 100 bp
182996 184841: contig of 1846 bp
184942 184941: gap of 100 bp
184942 184941: gap of 100 bp
184942 184945: contig of 1404 bp
186346 186345: contig of 1404 bp
186346 186345: contig of 1190 bp
186446 187635: contig of 1190 bp
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126569 131619: contig of 5051 b
131620 131719: gap of 100 bp
131720 136810: contig of 5091 b
136811 136910: gap of 100 bp
136911 139925: contig of 3015 b
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164402 166300: contig of 10
166301 166400: gap of 10
166301 168580: contig of 20
168581 168680: gap of 10
168681 171270: contig of 20
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177991 179786:
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113290 120559: contig of 7270
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171271 171370: gap of
171371 174092: cont
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144333   148902: cont
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                                                                                                                                 /note="assembly_fragment"
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                                                                                                                                                                                                                                                                                          /db_xref="taxon:9606"
/chromosome="18"
                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
  'note="assembly_fragment clone_end:T7 vector_side:right"
37899. .99510
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99610: gap of 100 bp
107273: contig of 7663 bp
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181478: contig of 1
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Homo sapiens
Eukaryota; Metazoa; Chordata;
Mammalia, Eutheria; Primates;
1 (bases 1 to 188255)
                                                                                        AP000939.3 GI:8119080
HTG; HTGS_PHASE1; HTGS_DRAFT.
Homo sapiens DNA, clone:RP11-839023
                                                                                                                                                                    AP000939 188255 bp DNA linear HTG 30-MAY-2000 Homo sapiens chromosome 18 clone RP11-839023 map 18p11.3, WORKING DRAFT SEQUENCE, 32 unordered pieces.
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149003. .152918
/note="assembly_fragment"
153019. .156399
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136911. .139925
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113290 .120559
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99611. .107273
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131720. .136810
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120660. .126468
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                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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Submitted '...'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924)
On May 31, 2000 this sequence version replaced gi:6997751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujlyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 188,255 genomic DNA of 18p11.3 published Only in DataBase (1999)
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                         182836
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Sagamihara, Kanagawa 228-8555,
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and Sakaki, Y.
    FEATURES
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* NOTE: This is a 'working draft' sequence. It currently

* consists of 32 contigs. The true order of the pieces

* is not known and their order in this sequence record is

* arbitrary. Gaps between the contigs are represented as
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119201: contig of 6052
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113049: contig of 6971
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51010: contig of 17121
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Novel human coding	ABN5964	24	6368	8.3	113.4	O1
Human COL5A3 cDNA		23	6200	8.3	113.4	**
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Prostate cancer-as		24	5060		114	J
DNA encoding nove		2	6691		114.8	w
Human EST-derived		22	6358	8.4	114.8	w
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iffe		2	4816	٠	114.8	٠,
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Human polynucleot		2	986		115.2	_
Bovine alpha1(I) c		2	4748	٠	115.8	~
Human benign pros		24	9287		117	٠٠
Collagen-like pol		17	756		118	-
Collagen-like poly		14	756		118	_
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Human breast cance		N	8284	٠	121.4	_
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Human PRO7223 cDNA	ABL8808	24	2005		1357.4	_

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                                                                                                                                                                                                                                                                    New collectin of human origin having antibacterial and antiviral activity, and gene encoding it useful for production of transgen animals and of antibodies for screening potential drug molecules
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                           GACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGA
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AATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA
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RESULT 3
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                                                    GAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTC
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AATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA
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receptor; SRCL-P1; macrophage; basal immunity;
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Matches 1371;
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10-OCT-2000;
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                             ATCATTAGCAATATCAGTTACACAGCCCACCACCTGCGGACGCTGACCAGCAATCTAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-497076/54.
DB; AAG63346.
AATAATACCCTGGCCAACATCCGTTTGGATTCTGTTTCTCTCAGGATGCAACAAGATTTG
                                                                                                                                                                                            ATGAACAGCCAGCTCAACTCACTCACAGGTCAGATGGAGAACATCACCACTATCTCTCAA
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         AATAACTTCATTTGCGAAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA
                                     GACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGCCAGGA
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RESULT 4 AAI60628

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Matches 1370; Conservative
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25-APR-2000;
09-JUL-2000;
19-JUL-2000;
                                                                                                      The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM8642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity, chemotratic/chemokinetic activity, hemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
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19-OCT-2000;
29-NOV-2000;
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Wang
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                Note: The sequence specification.
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DB; AAM41472.
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2000US-0552317.
2000US-05598042.
2000US-0620312.
2000US-0652450.
2000US-0662191.
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2000US-0727344.
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                                                                                                              The present invention provides the protein and coding sequences for 25 novel extracellular matrix and adhesion-associated proteins (EXMADS). These are designated EXMAD-1, EXMAD-2, EXMAD-3, EXMAD-4, EXMAD-5, EXMAD-1, EXMAD-2, EXMAD-2, EXMAD-23, EXMAD-24, and EXMAD-25. They are useful in the prevention and treatment of cancers, cell proliferation, cardiovascular, reproductive, immune, musculoskeletal, developmental and gastrointestinal disorders and inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bandman
Azimzai
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Alzhedner's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis. (I) is involved in chemotactic or chemokinetic activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopaenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders or periodontal disease. (I) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis, diabetes mellitus, myasthenia gravis, allergic reactions and conditions, such as asthma or other respiratory problems. (II) is useful to express recombinant protein, as markers for tissues in which the corresponding protein is preferentially expressed and in gene therapy. The present of the present of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or genetic disorders. (I) induces the proliferation of neural cells and regeneration of nerve and brain tissue and is useful for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (cDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to angiogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytokine, cell proliferation, cell differentiation, antiinflammatory, stem cell growth factor activity and activin or inhibin-related
Sequence 2929 BP;
901 A; 699 C; 692 G;
637 T; 0 other;
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Query Match Best Local S Matches 1370; Similarity Conservative 99.9%; Score 1369.4; Pred. No. 0; 0; Mismatches 0; DВ 1; 24; Length Indels 0; Gaps 0;

В δÃ Вb Ş В δÃ 1041 121 981 61 GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAAC ATGAACAGCCAGCTCAACTCATTCACAGGTCAGATGGAGGAACATCACCACTATCTCTCAA GCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACACAAAGATGCAGAGAATAGAACA GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAAC GCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACACAAAGATGCAGAATAGAACA ATGAACAGCCAGCTCAACTCACTACAGGTCAGATGGAGAACATCACCACTATCTCTCAA 120 1040 980 1100 60 180

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241 GAAGTCAGGACCACTTGCACAGATACCCTTACCAAACACACAGATGATCTGACCTCCTTG GAAGTCAGGACCACTTGCACAGATACCCTTACCAAACACACAGATGATCTGACCTCCTTG

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                                     human;
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                                                                                                                                                                                                          This sequence encodes a human secreted protein of the invention. CC This DNA sequence was isolated from a human adult brain cDNA collibrary, and was designated clone bv27_1. The DNAs and proteins cC library, and was designated clone bv27_1. The DNAs and proteins cC are predicted to have biological activities which would make them collibrary at the preventing or ameliorating medical conditions in collibrary although no supporting data is given. Suggested activities include nutritional sources or supplements, immune cc stimulating or suppressing activity, haematopoiesis regulating activity, ctissue growth activity, activity, haematopoiesis regulating activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, creceptor/ligand activity, anti-inflammatory activity, cadherin/tumour collibrated to be useful for gene therapy. A host cell transfected collibrated to be useful for gene therapy. A host cell transfected with the DNA, or its subfragments and variants is useful for recombinant collibrated to be useful for gene therapy.
                                                                                                                                                    Query Match
Best Local Similarity
Matches 1370; Conserv
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04-JUN-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New polynucleotides encoding secreted human proteins human foetal brain, adult brain, foetal kidney, adult retina, adult placenta or adult uterus cDNA libraries
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            GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTTTGGAAC
GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAAC
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25-APR-2000;
09-JUL-2000;
19-JUL-2000;
03-AUG-2000;
14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
                                                                           The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity. Parager Syndrome. Other uses include the utilisation of the activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and
                    C.N.S disorders.
Note: The sequence specification.
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2000US-0631450.

2000US-06631450.

2000US-0693036.

2000US-0727344.
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23-AUG-2000

24-AUG-2000

07-SEP-2000

15-SEP-2000

18-SEP-2000

18-SEP-2000

24-CCT-2000

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08-NOV-2000

08-NOV-2000

01-DEC-2000

01-DEC-2000

20-DEC-2000

20-DEC-2000

20-DEC-2000

21-DEC-2000

21-DE
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25-JUL-2000;
25-JUL-2000;
25-JUL-2000;
28-JUL-2000;
02-AUG-2000;
17-AUG-2000;
23-AUG-2000;
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2000US-22064P.
2000WG-US20710.
2000US-22595P.
2000WG-US23522.
2000WG-US23522.
2000WG-US23328.
2000US-20678P.
2000US-20678P.
2000US-0664610.
2000US-066532.
2000WG-US3328.
2000WG-US3328.
2000WG-US30873.
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2000WG-US30873.
2000WG-US30873.
2000WG-US30873.
2000WG-US366666.
2001US-0767609.
2001WG-US66520.
2001WG-US66520.
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                                                                                                                                                                                                                               The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention.
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Godowski I
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                                           GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAAC
                                                                                      GCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACACAAAGATGCAGAGAATAGAACA
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           ATCATTAGCAATATCAGTTACACAGCCCACCACCTGCGGACGCTGACCAGCAATCTAAAT
                                                                            GCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACACAAAGATGCAGAATAGAACA
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GCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAAC
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PAONI
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Williams PM, Woo
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Pred. No. 0;
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           GAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTC
                                         GAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCATA
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20-JUL-2000;
25-JUL-2000;
25-JUL-2000;
25-JUL-2000;
28-JUL-2000;
02-AUG-2000;
17-AUG-2000;
    Baker KP,
Godowski
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2001WO-US06666.
2001US-0802706.
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2001US-0828366.
2001US-0854208.
2001US-0856028.
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2000WO-US30952.

2000WO-US30873.

2000WO-US32678.

2000US-0747259.

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2000US - 210624P.
2000US - 220664P.
2000US - 220664P.
2000US - 222695P.
2000US - 0643657.
2000US - 0643657.
2000US - 023328.
2000US - 23397BP.
2000US - 23097BP.
2000US - 2665350.
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    CCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAG
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Conservative

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Mismatches

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antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosin a cardiovascular, endothelial or anglogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophiebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver
                                                                                     carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABL88259 to ABL88267 represent primers and probes used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                               ABL88072 to ABL88258 encode the PRO proteins given in ABB84817 ABB85003. The PRO proteins and polynucleotides have cardiant, cantiangiogenic, hypotensive, vulnerary and antiarregrosclerotic
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                                                                                                 Human; chromosome mapping; gene mapping; gene therapy;
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CC Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO CC at fip. wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local :
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23-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cellular stress response protein; CSR1; CSR2; CSR3; human; macropha scavenger receptor protein; intracellular stress; arteriosclerosis; diabetic circulatory obstruction; microbial infection; ss.
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13-AUG-1997;
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              GTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATTGTGAACATCATTAG
                                                 AGAGAACATGCATGATCTTCAGTACCATACCCACTACGCCCAGAACCGCACTGTGGAGAG
                                                                GCAGAACCTGAAAGACCTGCAGGACTTACACAAAGATGCAGAGAATAGAACAGCCATCAA 128
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GTTTGAGTCTCTGGAAGGACGCATGGCTTCTCACGAGATTGAAATTGGCACCATCTTCAC
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Search completed: March 21, 2003, 02:19:04
Job time: 298.589 secs

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/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
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US-08-253-155A-20
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US-08-39-889-1
US-09-167-364-1
US-09-439-897-1
US-09-439-897-1
US-08-855-669-11
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Sequence 70, Ap	Sequence 16, App	Sequence 96, App	Sequence 98, App	Sequence 63, App			Sequence 94, App	Sequence 116, App		Sequence 693, Ap	Sequence 624, Ap	Sequence 726, Ap	Sequence 647, Ap	Sequence 372, Ap	Sequence 66, Appl	Sequence 1, Appli	sequence 40, App

## ALIGNMENTS

GENERAL INFORMATION:

APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135

CORRESPONDENCE ADDRESS:

```
US-08-642-255-60
                                                                                                                                                                REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A55556-3/BIR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
TELEFAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 60:
SEQUENCE CHARACTERISTICS:
 Matches
                 Best
                              Query Match
                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Very Current Application Data:
Application Number: US/08/642,255
                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
                                                                           MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 4 Embarcadero Center, Suite 3400 CITY: San Francisco STATE: California
              Local
                                                                                                       LENGTH: 810 base pairs TYPE: nucleic acid STRANDEDNESS: double TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
250;
              Similarity
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 Conservative
                                                                           other nucleic acid
/desc = "synthetic"
            8.9%;
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0;
Score 121.6; 1
Pred. No. 4.1e
0; Mismatches
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.6; DB 1;
4.1e-23;
ches 214;
Indels
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Gaps
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465 ACTACAAGGTCCACCGGGCCCCAGGGGTCCCAAGAGGTGACAGAGGATCCCCAGGGACCCCC 524

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                                                                                                                      REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A555
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8700
TELEPAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 50, Application US/08642255 Patent No. 5773249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                          CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, BETTTAM I.
                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
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APPLICANT:
                                                                                                       SEQUENCE CHARACTERISTICS
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Polonia
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                               TOPOLOGY: linear
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 DESCRIPTION:
                                                   STRANDEDNESS:
                                                                                                                                                                                                                                                                                                       FILING DATE:
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mess: double
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San Francisco
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other nucleic
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"synthetic"
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RESULT 3
US-08-655-086-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: GRUSKI
                                                            APPLICATION NUMBER: US/08/655
FILING DATE: 03-7UN-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEEN, JEFFREY S.
REGISTRATION NUMBER: 32,063
REFERENCE/DOCKET NUMBER: 203-
TELEFAX: 51
                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                          COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                           TELECOMMUNICATION INFORMATION: 516-228-8484
                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                              STATE:
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               516-228-8516
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SEQUENCE CHARACTERISTICS:

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US-08-253-155A-61/c
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                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 61, Application US/08253155A Patent No. 5691147
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: ASCII (text) CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: LAHIVE & COCKFIELD
                                                                                                                                                                                                                                                                                                                                       APPLICANT: Gyuris, Jeno
APPLICANT: Draetta, Giulio
TITLE OF INVENTION: CDK4 Binding Proteins
NUMBER OF SEQUENCES: 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE:
                               APPLICATION NUMBER: US/0
FILING DATE: 02-JUN-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                            COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     862 ATGCCAGGCCCCAAGGGCCCCCCCGGCCCTCCTGGCCCATCAGGAGCGGTGG 913
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: unknown
                                                                                                                                                                                                                COUNTRY: U:
ZIP: 02109
                                                                                                                                                                                                                                                               STREET: 60 St
CITY: Boston
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                                                                                                                                                                           MEDIUM TYPE:
                                                                                                                                                                                                                                                    STATE:
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52.5%;
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ew P.
36,709
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US-08-642-255-48
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                                                                                                                                                                                                                                                                                                                                     Sequence 48, Apprairs 10, 5773249
                                                                                                                                                                                                                                                                                                                          Patent No. 5773249 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: (6)
SEQUENCE CHARACTERISTICS:
LENGTH: 506 base pairs
TYPE: nucleic acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227 7400
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                           APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: FLEHR, HO
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                                                                                                                                                             STREET: 4 Embarcadero Center, CITY: San Francisco
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                                                                                                                           COUNTRY:
                                                                                                                                                STATE:
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Similarity 53.8%;
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Pred. No. 7.5
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er, Suite 3400
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                      Version
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nes 217;
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APPLICATION NUMBER:

US/08/642,255

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                                                                                                        GENERAL INFORMATION:
APPLICANT: THE VICTORIA UNIVERSITY OF MANCHESTER
TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: d087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 150
                                                                                                                                                                                                                                                                                     Sequence 19, Application US/09029348 Patent No. 6171827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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TELEFAX: (415) 494-8771
TELEX: 910 277299 FMT UR
INFORMATION FOR SEQ ID NO: 48
OTHER INFORMATION: Description of OTHER INFORMATION: DERIVED FROM
                                   FEATURE:
                                                 ORGANISM: Artificial Sequence
                                                                         LENGTH: 1608
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 432 base pairs
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REFERENCE/DOCKET NUMBER: A5
TELECOMMUNICATION INFORMATION:
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NAME: ROWLAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              628 GAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAGGGCCCCCAAAGGCTCCCGTGGTTCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 508 GGATCCCAGGGACCCCTGGCCCAACTGGCAACAAGGGACAGAAAGGAGAGAAGGGGGGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: doub
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 CCTGGACCGGCTGGTCCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGTGCTCACGGCCCAGCAGGTCCGAAGGGCGCGCATGGCCCAGCAGGCCCGAAAGGTGCG
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54.0%;
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Pred. No. 4.5e-19;
of Artificial Sequence:
M cDNA OF PROCOLLAGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20, Application US/08253155A Patent No. 5691147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 229; Conserv
TELEFAX: (6:
INFORMATION FOR :
SEQUENCE CHARA:
TELECOMMUNICATION NUMBER: 36,709
REFERENCE/DOCKET NUMBER: MII-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 227-7400
TELEPAX: (617) 227-5941
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                              CURRENT APPLICATION DATA: APPLICATION NUMBER: US,
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Gyuris, Jeno
APPLICANT: Draetta, Giuli
TITLE OF INVENTION: CDK4
NUMBER OF SEQUENCES: 95
                                                                                                                          ATTORNEY/AGENT INFORMATION: NAME: Vincent, Matthew P
                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
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                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                        NAME: Vincent, Matthew P. REGISTRATION NUMBER: 36,7
                                                                                                                                                             CLASSIFICATION:
                                                                                                                                                                             FILING DATE: 02-JUN-1994
                                                                                                                                                                                                                                SOFTWARE:
                                                                                                                                                                                                                                                                                                                          COUNTRY: UI
ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                       CITY: Boston
                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE:
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Pred. No. 8e-19;
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Best Local 9
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TOPOLOGY: lin
MOLECULE TYPE:
                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/112,465
FILING DATE: 27-AUG-1993
                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: Collagen COL4A6: Gene, Frotein at TITLE OF INVENTION: of Detecting Collagen Deficiency NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
FILING DATE: 27-AUG-199: ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             435
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                                                                    CLASSIFICATION: 435
                                                                                   APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                    ADDRESSEE: Foley & Lardner STREET: 3000 K Street, N.W., CITY: Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75
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les 226; Conserv
                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCCAGG 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTGCCCGGCTGGACCTCAACGTCCGGAACCTCTCCCATGATCGTGGAGGAGGATGAAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCCAGG 441
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAATACCCTGGCCAACATCCGTTTGGATTCTGTTTCTCTCAGGATGCAACAAGATTTGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCAGGACCACTTGCACAGATACCCTTACCAAACACACAGATGATCTGACCTCCTTGAA 302
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGAGGTTTGAGTCTCTGGTAGGACGCATGGCTTCTCACGAGATTGAAATTGGCACCAT 134
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGGGACACAGAATGGGGAGATCCTTCGGAATGTAACATCCTACGAGGTGCCCCCCGGC
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                                                                                                                                                                                                                            20007-5109
                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                             Zhou, Jing
VENTION: Collagen COL4A6: Gene, Protein and Method
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                                                                                                                                                                                                                                                                                              Sequence 1, Application US/07621091G Patent No. 5424408
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                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Reeder
APPLICANT: G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3...
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macinto:
                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Yale University,
STREET: 246 Church Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 40
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
TELEPAX: (202)672-5399
                                                                                                                                                                                       TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2680
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hes 220;
                                                                    ZIP:
                                                                                                                          CITY:
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STRANDEDNESS: double
                                                                                      COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
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 Macintosh OS7.0
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                                                                                                                                                                                                                                                          Stephen T., Morrison,
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                                  3.50 inch, 800K storage
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Pred. No. 5.3e-17;
0; Mismatches 200
                                                                                                                                                         Office of Cooperative Research
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                                                                                                                                                                                                                                                               Karen
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ATTORNEY/AGE...

NAME: Barth, Ric...

REGISTRATION NUMBER: 2810
REFERENCE/DOCKET NUMBER: 90098
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 972-1400
TELEPHONE: (212) 370-1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING CALASSIFICATION: 424
CLASSIFICATION: 424
PRIOR APPLICATION DATA: NO.
ATTORNEY/AGENT INFORMATION:
Rarth, Richard S.
781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            POSITION IN GENOME: NO. 5424408 known CHROMOSOME/SEGMENT: NO. 5424408 known PUBLICATION INFORMATION: NO. 5424408e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Microsoft Word 5.1a CURRENT APPLICATION DATA:
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LIBRARY: Bovin
CLONE: KMC15
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hes 228;
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CELL TYPE: Whole kidney
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN: Unknown INDIVIDUAL ISOLATE: Unknown
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                CCTGGCCCATCAGGAGCGGTGG 913
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ACTGGACCACCTGCAGCAGGGG
                                                                  GGAGAGCAAGGACCACCTGGATCCGATGGCCTGCCAGGCTTGAAGGGGGAAACCTGGAGAC
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Similarity 51.6%;
28; Conservative
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KMC15
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Pred. No. 3.9e-17;
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RESULT 11
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; LOCATION: (1)..(1416)
US-08-399-889-1
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US-08-399-889-1
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                                                                                               Sequence 1, Application US/09167364 Patent No. 6007980 GENERAL INFORMATION:
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Best Local Similarity
Matches 228; Conserv
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                                   APPLICANT: Reeders, Stephen
APPLICANT: Morrison, Karen F
APPLICANT: Hudson, Billy G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/08/39,889B CURRENT FILING DATE: 1995-03-07 EARLIER APPLICATION NUMBER: 07/621091 EARLIER FILING DATE: 1990-11-30 NUMBER OF SEQ ID NOS: 25 SOFTWARE: Patentin Ver. 2.0
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APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen
FILE REFERENCE: 951263A
                    TITLE
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FEATURE:
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E OF INVENTION: Alpha-3 Chain REFERENCE: 951263B
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51.6%;
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Pred. No. 3.9e-17;
                    Туре
                    IV Collagen Polypeptides
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Best Local Query Match

Similarity

51.6%;

Length 1416;

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; NAME/KEY: CDS
; LOCATION: (1)..(1416)
US-09-167-364-1
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                                                                                                                  CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                          Sequence 1, Application US/09439897 Patent No. 6277558 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/167,364
CURRENT FILING DATE: 1998-10-07
EARLIER APPLICATION NUMBER: 08/399889
EARLIER FILING DATE: 1995-03-07
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 1
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Best Local Similarity
Matches 228; Conserv
NAME/KEY: CDS
LOCATION: (1)..(1416)
-09-439-897-1
                                                                                                                                                                                                         APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 95-1263-C
                                                             TYPE: DNA ORGANISM: Bos taurus
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Patent No. 5691197
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application Patent No. 5691197
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                                                                 SOFTWARE: Word Perfect 5 CURRENT APPLICATION DATA:
                                                                                                                                   ZIP: 44114-2518
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette,
MEDIUM TYPE: 720 Kb s
                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
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                                                                                                 COMPUTER: IBM PS/
OPERATING SYSTEM:
                                                                                                                                                                                                                                                       STREET: 1100 Supe
STREET: Suite 700
                                 FILING DATE:
                                                 APPLICATION NUMBER:
                                                                                                                                                                                      COUNTRY: U.S.A. ZIP: 44114-2518
                                                                                                                                                                                                                                         CITY:
                                                                                                                                                                                                                                                                                       ADDRESSEE: Fay, Sharpe, Beall, ADDRESSEE: Minnich & McKee
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Pred. No. 3.9e-17;
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                                                                                                                                                                                                                                               Sequence 1, Applic
Patent No. 6063901
                                                                                                                                                  Patent No.
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Best Local
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INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                               TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 24,175
REFERENCE/DOCKET NUMBER: TR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (216) 861-5582
TELEPAX: (216) 241-1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: Linear
MOLECULE TYPE: Nucleotide-genomic [
HYPOTHETICAL: No. 5691197 relevant
                                                                                                                                                TITLE OF INVENTION:
ent No. 6063901
                                                                                                                                                                                   APPLICANT:
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                                                 CORRESPONDENCE ADDRESS:
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TYPE: Nucleic acid
STRANDEDNESS: Single
ADDRESSEE: Fay, Sharpe, Beall, Fagan, ADDRESSEE: Minnich & McKee STREET: 1100 Superior Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity es 229; Conserv
                                                                                                                                                                                                                                                                                                                                               CTTCCTGGGCCAGCAGGACCCCCGG
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Kangas, Maarit
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Elomaa, Outi
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                                                                               No. 6063901el Macrophage Receptor
a Collagenous Domain and the
Polypeptide Chain Encoded by
such a Sequence
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Pred. No. 4.9e-17;
0; Mismatches 216;
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Best Local Similarity
Matches 229; Conserv
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INFORMATION FOR SEQ ID NO: 1:
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REFERENCE/DOCKET NUMBER: TRN
TELECOMMUNICATION INFORMATION:
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MEDIUM TYPE: Diskette,
MEDIUM TYPE: 720 Kb s
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HYPOTHETICAL: No.
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LENGTH: 1868 base pair
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
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TYPE: Nucleic acid
STRANDEDNESS: Single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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CTTCCTGGGCCAGCAGGACCCCCGG
                 CCTCCTGGCCCATCAGGAGCGGTGG
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                                                                 CCAGGCCCTCAAGGTGCACCAGGACTTTCAGGTGCCAAGGGTGAGCCAGGACGCACTGGT
                                                                                              GGTTTGGCTGGATCTCCAGGAGTCAAAGGTGACCAAGGAAAACCTGGAGTGCAGGGTGTT
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44114-2518
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(216) 241-1666
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No. 6063901 relevant
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Pred. No. 4
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1.9e-17;
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RESULT 15 US-08-555-669-11

Sequence 11, Application US/08555669 Patent No. 5773248

GENERAL INFORMATION:

Brewton,

Richard G.

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Matches 229
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2543 hass
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM COMPATION
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version
CURRENT APPLICATION DATA:
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                                                                                       769 GCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGACCT 828
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LOCATION:
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nes 229; Conserv
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STATE: New York
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Halluin, Albert P. REGISTRATION NUMBER: 25,227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
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1155 Avenue of the Americas
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Db 944 CCGGGCATGCCAGGCAAGGACGGCCAGAATGGCCAGGACTCGATGGCCAGAAGGGA 1003
QY 889 CCTCCTGGCCCATCAGGAGCGGTGG 913
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Search completed: March 21, 2003, 08:25:41 Job time: 61.326 secs

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1004 GAGGCTGGTCGCAACGGTGCTCCGG 1028

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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| (gn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
| (gn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
| (gn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
| (gn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
| (gn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
| (gn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
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/cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq:*
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10 US-09-980-107-3946
10 US-09-924-340-57
10 US-09-925-600A-57
10 US-09-925-301-42
10 US-09-925-301-42
10 US-09-925-299-206
10 US-09-954-531-961
10 US-09-964-824A-255
10 US-09-954-456-786
10 US-09-954-456-786
10 US-09-954-456-762
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5089.177 Million cell updates/sec
Sequence 198, App Sequence 3946, App Sequence 57, Appl Sequence 64, Appl Sequence 42, Appl Sequence 206, App Sequence 206, App Sequence 206, App Sequence 207, Appl Sequence 208, Appl Sequence 25, Appl Sequence 25, Appl Sequence 25, Appl Sequence 276, Appl Sequence 6, Ap
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US-09-745-763-198
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## ALIGNMENTS

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US-09-745-763-198

Sequence 198, Application US/09745763

Patent No. US2002065394A1

GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
McCOy, John M.
LAVAilie, Edward R.
COllins-Racie, Lisa A.
Evans, Cheryl
Merberg, David
Treacy, Maurice
Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 219
CORRESPONDENCE ADDRESS:
ADDRESSE: Genetics Institute, Inc.
STREET: 87 Cambridge
STATE: MA
COUNTRY: U.S.A.
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIF: 02140
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/745,763
FILING DATE: 18 -UN-2000
CLASSIFICATION: -Unknown>
APPLICATION NUMBER: 41,233
TELECOMMUNICATION INFORMATION:
NAME: Sprunger, Suzanne A.
REGISTRATION STATES AND SECONDATION:
NAME: Sprunger, Suzanne A.
TELEPHONE: (617) 498-8284
TELEPAX: (617) 498-8284
INFORMATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
LENGTH: 2930 base pairs
TYPE: nucleic acid
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STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID
US-09-745-763-198
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                                                                                                                                                                 GGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCTCAGGGCCCCCAGTGGGGAC
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                  TCAGGAGCGGTGGTGCCCCTGGCCGGAGAATGAGCCAACCCCGGCACCGGAGGACAAT
                                     TTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGACCTCGGGGACTGCCA
                                                                                                                  CCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGC
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Pred. No. 0;
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; ORGANISM: Homo US-09-954-456-782
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CURRENT FILING DATE: 2001-09-18
PRIOR APPLICATION NUMBER: US/60/233,617
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US/60/234,052
PRIOR APPLICATION NUMBER: US/60/234,952
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR FILING DATE: 2000-09-26
PRIOR PILING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,638
PRIOR PILING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,711
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                                                                                                                                  SOFTWARE: PatentIn
SEQ ID NO 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 782,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: PROCESS TITLE OF INVENTION: Sets FILE REFERENCE: 689290-76
                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US/60/235,863 PRIOR FILING DATE: 2000-09-27
                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US/60/235,720 PRIOR FILING DATE: 2000-09-27 PRIOR APPLICATION NUMBER: US/60/235,840 PRIOR FILING DATE: 2000-09-27
                                                                                                 LENGTH: 67
TYPE: DNA
                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Young,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2241
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al Similarity
237; Conserv
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                 8.1%;
53.0%;
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                 Score 111;
Pred. No. 2
                 DB 10;
.6e-20;
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Matches

Conservative

0,

Mismatches

210;

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Gaps

0,

Local

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APPLICANT: Horne, Darci T.

APPLICANT: Vockley, Joseph G.

APPLICANT: Scherf, Uwe
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.

TITLE OF INVENTION: Gene Expression Profiles in
FILE REFERENCE: 44921-5028-W0
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-66-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/237,054
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 3946
LENGTH: 6728
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3946, Application US/09880107 Patent No. US20020142981A1 GENERAL INFORMATION:
                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                   Best Local
                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
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CGGGTGAGAGAGGCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGAT 646
                                            GTCCCCCAGGTCCCCCTGGAAAGAATGGAGATGATGGGGGAAAGCTGGAAAACCTGGTCGTC
                                                                                    GCCCAACTGGCAACAAGGGACAGAAAGGAGAGAGAGGGGGGAGCCTGGACCACCTGGCCCTG 586
                                                                                                                                TCCAAGGTCCCCCTGGTGAGCCTGGCGAGCCTGGAGCTTCAGGTCCCATGGGTCCCCGAG 780
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                                                                                                                                                                                                                           Conservative
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53.0%;
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                                                                                                                                                                                                                         Score 111; DB 10;
Pred. No. 2.6e-20;
0; Mismatches 210;
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US-09-924-340-57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: JPatent
SEQ ID NO 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
LOCATION: 476..964
NAME/KEY: 3'UTR
LOCATION: 965..1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS
FILE REFERENCE: 91.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/293,574 PRIOR FILING DATE: 2001-05-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/302,277 PRIOR FILING DATE: 2001-06-29 PRIOR APPLICATION NUMBER: US 60/298,698 PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                          NAME/KEY: polyA_site LOCATION: 1118..1133
                                                                                                                                                                                                                                                                                                                    NAME/KEY: polyA_signal LOCATION: 1101..1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: 5'UTR
LOCATION: 1..475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
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                      495 AAGAGGTGACAGAAGGATCCCCAGGGACCCCCTGGCCCAACTGGCAACAAGGGACAGAAAGG 554
                                                                                                                          435 GCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCCACCGGGCCCCCAGGGGTCC 494
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169 CAGAGGAGAGCGAGGACCCCAAGGTAACTCCGGTGAGAAGGGCGACCAGGGATTTCAAGG
                                                                                  109 GCAAGAGCAGGGCCCCCCAGGATCTGAAGGCCTCCCAGGCCCCCCAGGCCCCAGCGGTCC 168
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                                                                                                                                                                                      Local
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                                                                                                                                                                    l Similarity 52.
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                                                                                                                                                                                        8.1%;
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                                                                                                                                                                  Score 110.6; DB 9;
Pred. No. 1.2e-20;
0; Mismatches 229;
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US-09-992-600A-57
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                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
                                                                                                                                                                                                           FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..475
                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES
FILE REFERENCE: 91.US4.DIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Benjanin, Stephane APPLICANT: Tanaka, Hiroaki
                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: JPatent
                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 09/924,340
                               FEATURE:
NAME/KEY: polyA_signal
LOCATION: 1101..1106
                                                                                                                                                                                                                                                                                           LENGTH: 11
TYPE: DNA
                                                                                                                                                     NAME/KEY: CDS
LOCATION: 476..964
                                                                                             NAME/KEY: 3'UTR
LOCATION: 965..1133
                                                                                                                                       FEATURE:
                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
NAME/KEY: polyA_site
                     FEATURE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 60/302,277 FILING DATE: 2001-06-29
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CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 64
                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-925-302-64
; Sequence 64, Application US/09925302
; Patent No. US20020044941A1
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US-09-992-600A-57
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Best Local Similarity
Matches 267; Conserv
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                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Rosen et al. TITLE OF INVENTION: Nucleic Acids, Proteins FILE REFERENCE: PA104
                                                                                           FEATURE:
NAME/KEY: misc feature
LOCATION: (2653)
THEODEMATION: n e
                                                                                                                                                                                  TYPE: DNA
NAME/KEY: misc feature LOCATION: (2683)
                                    OTHER INFORMATION: n equals a,t,g,
                                                      NAME/KEY: misc feature LOCATION: (2667)
                                                                                         OTHER INFORMATION: n equals
                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                   LENGTH:
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52.9%;
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Pred. No. 1.2e-20;
""ematches 229;
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; OTHER INFORMATION: n equals a,t,g, US-09-925-302-64

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: Sequence 42, Application US/09925301

: Patent No. US20020052308A1
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                                                                                                                             Query Match
Best Local Similarity
Matches 274; Conserv
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins
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Best Local Similarity
                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 42
LENGTH: 2192
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                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/925,301
CURRENT FILLING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05882
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1694
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: PA106
                                                                                                                                                                                                                                         TYPE: DNA
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869
                                                                                                 472 GGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCA 531
                              532 ACTGGCAACAAGGGACAGAAAGGAGAGAAGGGGGGAGCCTGGACCACCTGGCCCTGCGGGT
                                                                 638 GCCCCCCTGGACCCCCTGGTGCTCCTGGTGCTCCTGGTGCCCCTGGCCCCCTTGGCCCT 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31
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GGGCCTACTGGTCCAAGAGGA 471
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                                                                                                                                  Score 107.2; DB 10;
Pred. No. 1.6e-19;
0; Mismatches 228;
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Pred. No. 4.3e-20;
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APPLICANT: Gene Logic, Inc.
APPLICANT: Gene Logic, Inc.
FILTE OF INVENTION: Gene Expression Profiles in
FILE REFERENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ. ID NOS: 3950
NUMBER OF SEQ. ID NOS: 3950
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                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                    Query Match
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LOCATION: (1)..(5086)
OTHER INFORMATION: n =
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                                      AGGTCAAACAGGAGCCCGTGGGCTTCCTGGTGAGAGGACGTGTTGGTGCCCCTGGCCC
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Scherf, Uwe
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Pred. No. 2.9e-19;
0; Mismatches 235;
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PRIOR APPLICATION NUMBER: PCT/US00/05883

PRIOR FILING DATE: 2000-03-08

PRIOR PRIOR PRICATION NUMBER: 60/124,270

PRIOR FILING DATE: 1999-03-12

NUMBER OF SEQ ID NOS: 1556

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 206

LENGTH: 5145
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LOCATION: (4)
OTHER INFORMATION: n equals a,t,g, o;
NAME/KEY: misc_feature
LOCATION: (17)
OTHER INFORMATION: n equals a,t,g, o;
NAME/KEY: misc_feature
LOCATION: (5126)
OTHER INFORMATION: n equals a,t,g, o;
NAME/KEY: misc_feature
LOCATION: (5143)
OTHER INFORMATION: n equals a,t,g, o;
NAME/KEY: misc_feature
LOCATION: (5143)
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                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins
FILE REFERENCE: PA102
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens FEATURE:
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                                                       ACAGCCCGGTGCTCCTGGTGTGAAGGGTGAACCTGGTGCCCCTGGTGAAAATGGAACTCC
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51.3%;
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                                                                                                                          Score 107; DB 9; 1
Pred. No. 2.9e-19;
0; Mismatches 235;
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                                                                                                             ; LOCATION: (5126); OTHER INFORMATION: n equals a,t,g,; NAME/KEY: misc_feature; LOCATION: (5143); OTHER INFORMATION: n equals a,t,g, US-09-925-299-206
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SEQ ID NO 206
LENGTH: 5145
                                                        Query Match
Best Local
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                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: (4)
OTHER INFORMATION: n equals a,
NAME/KEY: misc_feature
LOCATION: (17)
OTHER INFORMATION: n equals a,
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILLING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05883
PRIOR FILING DATE: 2000-03-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/124,270 PRIOR FILING DATE: 1999-03-12 NUMBER OF SEQ ID NOS: 1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: PA102
                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                     FEATURE:
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                                                      7.8%;
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                                       Score 107; DB 10;
Pred. No. 2.9e-19;
0; Mismatches 235;
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APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTMARE: PERL Program
SEQ ID NO 22
LENGTH: 5432
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
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Best Local Similarity
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ATCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCA 704
                                                                                                                         AGGTCAAACAGGAGCCCGTGGGCTTCCTGGTGAGAGAGGACGTGTTGGTGCCCCTGGCCC
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                                                     AGCTGGTGCCCGTGGCAGTGATGGAAGTGTGGGTCCCGTGGGTCCTGCTGGTCCCATTGG
                                                                                    TGCGGGTGAGAGGGCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGG
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                                                                                                                                                                                                                                                                       248;
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                                                                                                                                                                                                                                                                Score 107; DB 12;
Pred. No. 3e-19;
0; Mismatches 235;
                                                                                                                                                                                                                                                                                                   Length 5432;
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; SEQ ID NO 33
; LENGTH: 4908
; TYPE: DNA
; ORGANISM: Homo sapien
US-10-001-887-33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/001,887
CURRENT FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: 60/249,998
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: 60/252,563
PRIOR FILING DATE: 2000-11-22
NUMBER OF SEQ ID NOS: 137
SOFTWARE: Patentin version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-001-887-33
                                                                                                                                                                                                                                                                                                                                                                                         Query Match 7.8%; Score 106.8; DB 9; Best Local Similarity 52.9%; Pred. No. 3.2e-19; Matches 256; Conservative 0; Mismatches 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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APPLICANT: Recipon, Herve
APPLICANT: Cafferkey, Robert
APPLICANT: Sun, Yongming
APPLICANT: Liu, Chenghua
TITLE OF INVENTION: Compositions and Methods
FILE REFERENCE: DEX-0269
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US-09-954-531-961
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Patent No. US20020165180A1
GENERAL INFORMATION:
APPLICANT: Weaver, Zoe
TITLE OF INVENTION: Gene Sets
FILE REFERENCE: 689290-77
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PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US/60/234,009
PRIOR FILING DATE: 2000-09-20
PRIOR APPLICATION NUMBER: US/60/234,034
PRIOR FILING DATE: 2000-09-20
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SOFTWARE: PatentIn version 3.0
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PRIOR FILING DATE: 2000-09-22
PRIOR APPLICATION NUMBER: US/60/234,567
PRIOR FILING DATE: 2000-09-22
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CURRENT FILING DATE: 2002-05-02
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ORGANISM: Homo sapiens
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Pred. No. 3.7e-19;
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Best Local Similarity
Matches 236; Conserv
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SOFTWARE: PatentIn version 3.0
SEQ ID NO 255
LENGTH: 2542
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APPLICANT: Horrigan, Stephen
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Pred. No. 3.7e-19;
0; Mismatches 217;
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; PRIOR APPLICATION NUMBER: US/60/235,863; PRIOR FILING DATE: 2000-09-27; NUMBER OF SEQ ID NOS: 2276; SOFTWARE: PatentIn version 3.0; SEQ ID NO 786; LENGTH: 5416; TYPE: DNA ORGANISM: Homo sapiens
US-09-954-456-786
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PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR FILING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,638
PRIOR APPLICATION NUMBER: US/60/235,638
PRIOR APPLICATION NUMBER: US/60/235,638
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 7.7%;
Best Local Similarity 51.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR APPLICATION NUMBER: US/60/233,617
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US/60/234,052
PRIOR FILING DATE: 2000-09-20
PRIOR FILING DATE: 2000-09-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using TITLE OF INVENTION: Sets FILE REFERENCE: 689290-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1039
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                          885
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                                                                                             ACCTCGGGGACTGCCAGGCTTGCCTGGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCC 884
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Db 1459 TGGCCCTCCTGGTGCTGCCGGTACTACTGGTGCCAGAGGACTTGTTGGTGAGCCTGGTCC 1518

Qy 945 GGC 947

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Search completed: March 21, Job time: 227.91 secs

2003, 08:22:21

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Contact: MGC help desk
Email: cgapbs-remail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Hump
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Conscribum (LLNL)
DNA Sequencing by: Baylor College of Medicine Human Genom
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Submitted (05-JUN-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Center code: BCM-HGSC
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AF85420 MR2-EN009
BEF929798 RC3-GN004
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BEF9297108 AGENCOURT
BIO10880 MR2-EN009
BMF017108 AGENCOURT
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AI742661 WG44f06 x
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BB749743 BB749743
BF854188 MR2-EN009
BF805750 QV1-CT017
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              CCAATTGGACCAGCTGGTCCCCCCGGAGAGCCTGGCCGCAAAGGATCTAAAGGCTCCCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X.,
Yoon, V.S., Kowis, C.R., Lawrence, S.,
Richards, S., Gibbs, R.A.
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//tissue_type="Mammary tumor. W Old, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
/lab_host="DHIOB"
/note="Wector: pcWV-SPORT6"
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Contact: Robert Strausberg, Femail: cgapbs-r@mail.nih.gov
                                                                                                   1 (bases 1 to 957)
NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health,
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AGENCOURT_8763247 NIH_MGC_129
5', mRNA sequence.
BQ955927
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EST.
                                                   Tissue Procurement: Susan L.
                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                       Mus musculus
cDNA Library Preparation: ResGen, Invitrogen Corp CDNA Library Arrayed by: The I.M.A.G.E. Consortium DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution informat
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/note="Organ: Olfactory epithelium; Vector:
/note="Organ: Olfactory epithelium; Vector:
pcMv-SpORT6.1.ccdb; Site_1: EcoRV; Site_2: NotI; Cloned
unidirectionally. Primer: Oligo dT. Average insert size
2.2 kb. Constructed by ResGen, Invitrogen Corp. Note: th
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269 c 258 g 169 t 1 others
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AGENCOURT_8754195 NIH_MGC_130 Mus
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Tissue Procurement: Mark Maconochie,
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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/clone_lib="NIH_MGC_130"
/clone_lib="NIH_MGC_130"
/lab_host="DH10B (phage-resistant)"
/note="Organ: otocysts; Vector: pCMV-SPORT6.1.ccdb;
/note="Organ: otocysts; Vector: pCMV-SPORT6.1.ccdb;
/site_1: ECORV; Site_2: NotI; Cloned unidirectionally.
Primer: Oligo dT. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is
NIH_MGC Library."

250 c 244 g 163 t 6 others
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/db_xref="taxon:10090"
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                                                                                                           Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Hum
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLN
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information
                                                                                                                                                                                       1 (bases 1 to 900)
NIH-MGC http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                 Mus musculus
Eukaryota; Metazoa;
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603172765F1 NCI_CGAP_Mam5
mRNA sequence.
                                                                          High
                                                                                  found through the I.M.A.G.E. Consortium/LLNL http://lmage.llnl.gov Plate: LLAM11636 row: b column: 17
                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                  National Institutes of Health,
Unpublished (1999)
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                                                                quality sequence stop: 7
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:5251888"
/clone_lib="NCI_CGAP_Mam5"
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Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="tumor, gross
/dev_stage="7 months"
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5', mRNA sequence.
BQ713873.1 GI:21852772
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Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CDNA Library Preparation: ResGen, Invitrogen Corp
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM13721 row: n column: 01
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National Institutes of Health, Mammalian Gene
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/note="Organ: Olfactory epithelium; Vector:
/note="Organ: Olfactory epithelium; Vector:
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/clone_lib="NIH_MGC_129"
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/db_xref="taxon:10090"
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, M
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5', mRNA sequence.
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CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information car
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: ATCC
                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
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/tissue_type="epidermoid carcinoma, cell line" /lab_host="DH10B (phage-resistant)" /note="DH20B (phage-resistant)" /note="Torgan: sallvary gland; Vector: pOTB7; Site_1: XhoI; Site_2: EcoRI; cDNA made by oligo-dT priming. Directionally cloned into EcoRI/XhoI sites using the following 5 adaptor: GGCACGAG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin
                                                                                                                        /clone="IMAGE:6212672"
/clone_lib="NIH_MGC_102"
                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
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Mammalia; Eutheria;
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148 c 167 g 137 t
           /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="CS0DE005YH04"
/clone_lib="LTI_FL002_PL1"
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851 GGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCCCCGGCCCTCCTGGCCCATCAGGAGCGG
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       Contact:
Email: cg
                                                                                                                                                                                         Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata;
Eutheria; Rodentia;
                                                                        Unpublished (1999)
                                                                                                     NIH-MGC http://mgc.nci.nih.gov/
National Institutes of Health,
                                                                                                                                                                          Mammalia; Eutheria;
1 (bases 1 to 580)
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c; Robert Stra
cgapbs-r@mail
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pcMvSPORT 6 vector. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville, Maryland 20850, USA Fax: (1) 301 610 8371 Email: fliang@lifetech.com URL: http://fulllength.invitrogen.com" 17 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Organ: placenta; Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not and cloned into the Not I and Eco RV sites of the convention of the conventi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /lab_host="DH10B"
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                                                                                                                                                                                                                                                        ACAAGTCTTCACATCTTGTTTTCATAAACACTAGAGAGGAACAGCAATGGATAAAAAAAC
                                                                                                                                                                                                                                                                                                                                   AATGCTACTATTTTCAGTTGAGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAG
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                                                                                                                   GGAAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTG 1214
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Plate: LLAM9128 row: m column: 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information
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Location/Qualifiers
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153 c 161 g 107 t
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/clone_lib="NCI_CGAP_Mam1"
/tissue_type="tumor, biopsy sample"
/dev_stage="10 months, virgin"
/deb_stage="10 months, virgin"
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Mammalia; E
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Tel: 301 838 3528
Fax: 301 838 0208
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Plate: 115
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The Institute for Genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R., , I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J.
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/db_xref="taxon:9606"
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/clone_lib="MAGE resequences, |
/note="Vector: pBluescriptSKm"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphre
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 601)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="tumor, gross tissue"
/dev_stage="7 months"
/lab_host="DH10B"
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/strain="C57BL/6J"
/db_xref="taxon:10090"
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/clone_lib="NCI_CGAP_Mam5"
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TITLE
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  AGCTGTCAAGTTCAGCCAACTTGAGGAACGCTTCCAGGTCTTTGAGACAGATATTGTGAA
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AGENCOURT_8765685 NIH_MGC_130
5', mRNA sequence.
BQ934501
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NIH-MGC http://mgc.nci.nih.gov/...
National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA Library Preparation: ResGen, Invitrogen Corp cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 house mouse.
Mus musculus
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                                                                                                                                                                                                                                                                                                                              /Clone_lib="NIH_MGC_130"
/lab_host="pH10B (phage_resistant)"
/lab_host="pH10B (phage_resistant)"
/note="Organ: otcoysts; Vector: pCMV-SPORT6.1.ccdb;
/note="Organ: otcoysts; Vector: pCMV-SPORT6.1.ccdb;
/note="Corgan: otcoysts; Cloned unidirectionally.

primer: Oligo dT. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is
NIH_MGC_Library."

a 225 c 205 g 172 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="IMAGE:6330794"
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Pred. No. 2.5e-84;
0; Mismatches 94
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Mus musculus cDNA clone IMAGE:6330794
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                                                          Email: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,
M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDN
prepare full-length cDNA libraries for rapid discovery of
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohar.
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., J., S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A.
hayashizaki,Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 638)
Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishi, Y., Ito, M., Kawai, J., Konno, H., Kouda, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Okazaki, Y., Okido, T., Saito, R., Sakai, C., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Takeda, Y., Tanaka, T., Toya, T., Muramatsu, M., and Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                        Laboratory for Genome Exploration Research Group, Sciences Center(GSC), Yokohama Institute The Institute of Physical and Chemical Research (11-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa
                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2001)
On Jul 6, 2000 this sequence version replaced
Contact: Yoshihide Hayashizaki
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    sequencing
10 (11), 1
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Tel: 81-45-503-9222
Fax: 81-45-503-9216
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
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  RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome 10 (11), 1757-1771 (2000)
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GGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGG
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Encyclopedia Project of Genome Exploration Research Group in R
Genomic Sciences Center and Genome Science Laboratory in RIKEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    prepare mouse tissues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Division of Experimental Animal Research in Riken contributed
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/lab_host="DH10B"
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/dev_stage="7 days neonat
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/clone="A730023E20"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: msoares@blue.weeg.ulowa.edu
Tissue Procurement: Dr. Gregg Hageman
cDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
cDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  University of Iowa
451 Eckstein Medical Research Building Iowa
Tel: 319 335 8250
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bonaldo, M.F., Lennon, G. and Soares, M.B. Normalization and subtraction: two approaches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Genetics (www.resgen.com).
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
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              /note="Organ: eye; Vector: pT7T3-Pac (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not I; UI-FEJO is a subtracted cDNA library constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonuclectide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA; lens, CCATTAAGCG; retina, CCGCG; Retina Foveal and
                                                                                                                                                                                                                                                                                                                                                   /db_xref="taxon:9606"
/clone="UI-E-EJO-ahq-c-05-0-UI"
/clone_lib="UI-E-EJO"
/clone_tib="fetal eyes, lens, eye anterior segment,
/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Soares, MB
                                                                                                                                                                                                                                                                                                  /dev_stage="fetal and adult"
/lab_host="DH10B (Life Technologies) (T1 phage resistant)"
                                                                                                                                                                                                                                                                                                                                           Choroid"
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                                                   Genetics (www.resgen.com).
The following repetitive elements were found sequence: 443-498, >POLY_A#Simple_repeat
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Tissue Procurement: Dr. Gregg Hageman cDNA Library preparation: Dr. M. Bento Soares, Univeristy of IowacDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of IowaDNA Sequencing by: Dr. M. Bento Soares, Univeristy of IowaClone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                               Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
University of Iowa
                                                                                                                                                             451 Eckstein Medical Research Building Iowa City,
Tel: 319 335 8250
Fax: 319 335 9565
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Bonaldo, M.F., Lennon, G. and Soares, M.B.
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                                                                                                                                 Email: msoares@blue.weeg.uiowa.edu
                                                                                                                                                                                                                                                                                                                                                      Genome Res. 6 (9), 791-806 (1996)
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TAG_TISSUE=human eye anterior segment
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123 c 89 g
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99.7%;
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in this cDNA

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RESULT 15
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ORIGIN
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                                                                                                                                                   VERSION
                                                                                                                                                                       ACCESSION
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Best Local Similarity
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    AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350;
                                                                                                                      808 bp mRNA
UI-M-FIO-byu-g-09-0-UI.r1 NIH_BMAP_FIO
IMAGE:5702432 5', mRNA sequence.
BQ771366.1 GI:21979842
EST.
                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
1 (bases 1 to 808)
                                                                                  Mus musculus
                                                                                                        house mouse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT773-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA; lens, CGATTAGGGA; eye anterior segment, AATGCGGAT; optic nerve, CCATTAAGTG; retina, CGGCG; Retina Foveal and Macular, GTCC; RPE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
http://mgc.nci.nih.gov/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="taxon:9606"
/clone="UI-EJO-ahq-c-05-0-UI"
/clone_lib="UI-EJJO"
/clone_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE a
Choroid"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /lab_host="DH10B (Life Technologies) (T1 phage resistant)"
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Pred. No. 1.2e-75;
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                                     Euteleostomi;
Murinae; Mus
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       TTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAA 1340
                                                                                                                                                                    GCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGC 1220
                                                                                                                                                                                                                                                                                                                                                          TGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGAT 1280
                                                                                                                                                                                                                                                                                      ATGGATAAAAAAACAGATGGTAGGGAGAGAGAGCCACTGGATCGGCCTCACAGACTCAGA 1160
                                                                                                                                                                                                                                                                                                                                                                                                                              GAACTTCACAGATAAATGCTACTATTTTTCATTGGAAAAAGAAATTTTTGAAGATGCTAA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCTCTGCAGAATGAACCAACCCCAGCATCAGAGGTCAACGGATGTCCGCCTCACTGGAA 60
                                                     TGGACAACCAGATAACTGGGGCAGTGGCCATGGGCCAGGAGAAGACTGTGCTTGGT
                                                                                                                                                 ACAGGAAAGCGAATGGAAGTGGCTAGACGGGTCACCTGTTGATTACAAAAACTGGAAAGC 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seq primer: pxx-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This clone was contributed by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     270
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gel.First strand cDNA synthesis was primed with oligo-dT primer containing a Not I site. Double strand cDNA was size selected according to mRNA size fraction, ligated with EcoR I adaptor, digested with NotI and then cloned directionally into pYX-Asc vector. The library tag sequence located between the NotI site and the polyA tail is CAGCCACGAC. This library was created for the University lowa Brain Anatomy Project (BMAP): "Gene Discovery in the Developing Mouse Nervous System", supported by National Institute of Mental Health (NIMH), Hemin Chin, Ph.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /lab_host="DH10B (T1 phage resistant)"
/note="Organ: Brain: Vector: pYX- Asc: Site_1: EcoR I;
Site_2: Not I; The library was constructed according
Bonaldo, Lennon and Soares, Genome Research, 6:791-806,
1996. Denatured RNA was size fractionated on a 1% agarose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                program coordinator."
158 c 173 g
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/db_xref="taxon:10090"
/clone="IMAGE:5702432"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="whole brain"
/dev_stage="embryo 12.5dpc"
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85.1%;
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361

TTACGCAGGACAGTGGAATGACTTCCAGTGTGATGAAATCAATAACTTCATTTGTGAGAA

420

Search completed: March 21, 2003, 08:08:10 Job time : 1811.64 secs

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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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Total number of hits satisfying chosen parameters:
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 1.0
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1026
1 atgcaacaagatttgatgag.....cagtactgtcatctgcatta 1026
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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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## ALIGNMENTS

AUTHORS	REFERENCE			ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	AB005145	RESULT 1	
Ohtai	٢	Mamm.	Euka	Homo	Homo	•	AB00	AB00	Homo	AB00			

2983 bp mRNA linear PRI 21-o sapiens CL-P1 mRNA for collectin placenta 1, complete 05145 05145.1 GI:17026100 PRI 21-NOV-2001 cds.

ryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; malia; Eutheria; Primates; Catarrhini; Hominidae; Homo. sapiens female tissue\_lib:placenta cDNA to mRNA. sapiens

Ohtani,K., Suzuki,Y., Eda,S., Kawai,T., Kase,T., Keshi,H., Sakai,Y., Fukuoh,A., Sakamoto,T., Itabe,H., Suzutani,T., Ogasawara,M., Yoshida,I. and Wakamiya,N.

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Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College, Department of Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido 078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp, Tel:+81-166-68-2393, Fax:+81-166-68-2399)
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J. Biol. Chem. 276 (47), 44222-44228 (2001)
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                                                          Genome Project.
This clone (DKFZp547G1215) is available at the RZPD in Berlin.
                                                                                                     Martinsried, GERMANY
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer
Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de;
sequenced by BMFZ (Biomedical Research Center at the Charite,
Berlin/Germany) within the cDNA sequencing consortium of the Ge.
                                                                                                                                                                                                                                                                                                                                      AL713657
AL713657.
at http://mips.gsf.de/proj/cDNA/.
Location/Qualifiers
                            Please contact the RZPD: Ressourcenzentrum, Her
Berlin-Charlottenburg, GERMANY; Email: clone@r:
information about the clone and the sequencing
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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/protein_id="CAD28466.1"
/db_xref="G:19584340"
/td_xref="G:19584340"
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PIGPAGPPGERGKGSKGSQGPKGSRGSPGKPGPQGSSGDPGPPGPEKEGLPGPQGP
PIGPAGPPGERGKGSKGSQGPKGSRGSPGKPGPQGSSGDPGPPGPEKEGLPGPQGP
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/tissue_type="brain"
/clone_lib="547 (synonym: hfbr1). Vector pSport1;
DH10B; sites NotI + SalI"
/dev_stage="fetal"
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PEDNGCPPHMKNFTDKCYYFSVEKEIFEDAKLFCEDKSSHLVFINTREEQQWIKKQMV
GRESHWIGLTDSERENEWKWLDGTSPDYKNWKAGQPDNWGHGHGPGEDCAGLIYAGQW
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    /organism="Homo sapiens"

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/note="similarity to
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/map="18p11.3"
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Sequence 27
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                                                                                                                         disorders involving angiogenesis
Patent: WO 0208284-A 27 31-JAN-2002;
Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone
(US); Gerber, Hanspeter (US); Gerritsen, Mary E. (US); Goddard,
Audrey (US); Godowski, Paul J. (US); Gurney, Austin L. (US);
Hillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US);
Paoni, Nicholas F. (US); Stephan, Jean-Philippe F. (US);
Watanabe, Colin K. (US); Williams, P. Mickey (US); Wood, William
I. (US)
                                                                                                                                                                                                                                                                               Baker,K.P., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A., Goddwski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J., Paoni,F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
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                                CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                                   GATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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           GGCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCG
                                                        CCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCC
                                                                                       CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
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 GCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCG
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Sequence
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Location/Qualifiers
1. 2005
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/db_xref="taxon:9606"
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Primates;
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                  CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
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                                                ATGGAAGAATGAAGCTAGTAGACTCCAAGCATGGTCAGCATCAAGAATTTTACAATA 120
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AX047353
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 2641)
1 (bases 1 to 2641)
                                                                                                                                                                                                                    Extracellular matrix and adhesion-associated patent: WO 0068380-A 39 16-NOV-2000; Incyte Genomics, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                            Bandman,O., Hillman,J.L., Tang,Y.T.,
Lu,D.A. and Azimzai,Y.
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/odb_xref="taxon:9606"
/odb_ref="taxon:9606"
/note="Incyte ID No: 4586187CB1"
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                                                      CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                               GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
                                                                                                                               GATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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                                           CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                      GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
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RESULT 6 AB038518 LOCUS

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mRNA receptor

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08-MAR-2001

VERSION KEYWORDS ACCESSION DEFINITION AB038518

SOURCE ORGANISM Homo Homo sapiens SRCL mRNA for scavenger type I, complete cds.
AB038518 AB038518.1 sapiens tissue\_lib:Placenta cDNA to sapiens mRNA

Eukaryota;

Metazoa; Chordata; Craniata; Vertebrata;

Euteleostomi;

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Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medio School, Division of Biochemistry, Blomedical Research Center; yamadaoka, Suita, Osaka 565-0871, Japan
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Location/Qualifiers
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KANNDTLEDMNSQLNSFTGQMENITTISQANEQLKDLQDLHKDAENRTAIKFNQLEE
RFQLFEYDIVMISNISYTAHHLRTLTSNLNEVRTTCTDTLTKHTDDLTSLNNTLANI
RLDSVSLRMQQDLMRSRLDTEVANLSVIMEEMKLVDSKHGQLIKNFTILQGPPGPRGP
RGDRGSGGFTGNKGQKGEKGEFGPFGAAGERGPIGFAGFERGGKGSKGSQGPK
GSRGSPGKPGGPFGNKGQKGEKGEFGPFGAAGERGPIGFAGFGGTGSKGSQGPK
GSRGSPGKFGPGGPSGAVVPLALQNEFTFAPEDNSCPPHWKNFTDKCYYFSVE
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          Ohtani, K., Suzuki, Y., Sakai, Y., Fukuoh, A.,
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Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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                                                                CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA 480
                                                                                                                      GGCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGCCCT
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GGACCTAGTGGGGACCCAGGACCACCAGGTCCACCAGGCAAGGATGGACTCCCTGGCCCT
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                                                   CAGGGCCCTCCTGGCTTCCAGGGACTACAGGGCACTGTGGGTGAGCCTGGAGTACCTGGA
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ILCALLTITVAILGYKVVEKMONVTDGMETSHQTYDNKLTAVESDLKKLGDQAGKKAL
STNSELSTERSDILDLRQQLQEITEKTSKNUTLEKLQANGDSLVDRQSQLKETLQNN
SELITTVKILQAYNGYVTNLQDTSYLQGINGSQMYSOSVVIMNLININLTOVQQRN
LISNLQQSVDDTSLAIQRIKNDFQNLQQVFLQAKKDTDWLKEKVQSLQTLAANNSALA
KANNDTLEDMNSQLSSETGQMDNITTISQANEQSLKDLDGDLHKDTENATAVKTSQLEE
REQVEETDIVNIISNISYTAHHLRTLTSNLNDVRTTCTDTLTRHTDDLTSLNNTLVNI
RLDSISLRMQQDMMRSKLDTEVANLSVVMEEMKLVDSKHGQLIKNFTILQGPPGPRGP
KGDRGSQGPFQFTGNKQQKGEKGEPGEPGPAGERGTIGPVGPFGERGSKGSKGSQFK
GSRGSPGKPGPQFPGRAGAMEPLALQNETTPASETWGCPPHWKNTTDKCYVSELE
KEIFEDAKLFCEDKSSHLVFINSREEQOWIKKHTVGRESHWIGLTDSEQESEWKWLDG
SPVDYKNWKAGQPDNWGSGHGPGEDCAGLIYAGQWNDFQCDEINNFICEKEREAVPSS
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/protein_id="BAC05523.1"
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/db_xref="taxon:10090"
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Submitted (18-FEB-2000) Kenji Nakamura, Osaka Un School, Division of Biochemistry, Biomedical Res yamadaoka, Suita, Osaka 565-0871, Japan (E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
                                                                                                                                                                                        Nakamura, K., Funakoshi, H., Tokunaga, F. and Nakamura, T. Molecular cloning of a mouse scavenger receptor with C (SRCL)(1), a novel member of the scavenger receptor fa Biochim. Biophys. Acta 1522 (1), 53-58 (2001)
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type II, comp
AB052103
                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (04-DEC-2000) Kenji Nakamura, Osaka University Gradu School of Medicine, Division of Biochemistry, Biomedical Resea Center; 2-2 yanadaoka, suita, Osaka 565-0871, Japan (E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nakamura, K. and Na
Direct Submission
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/codon_start=1
/codon_start=1
/product="scavenger receptor with C-type lectin type II"
/protein_id="BAB39148.1"
/db_xref="0I:13365553"
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KNNUTLEDMNSQLNSFTGQMENITTISQANEQNLKDLQDTLKGAENTTAIKFNQLEE
RFQLFETDYNNISNLSYTAHHLKTJTSNLNEYRTTCTDTLTKHTDDLTSLNNTLANI
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RLDSVSLRMQQDLMRSRLDTEVANLSVIMEEMKLVDSKHGQLIKNFTILQGPPGPRGP
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/db_xref="taxon:9606"
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                                                                                                                                                          HTG;
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AC016128.4 GI:10046526
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Birren, B., Linton, L.,
                              Unpublished
                                                              Birren, B., Linton, L., Nusbaum, C.
                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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GSRGSPGKPGPQGPSGDPGPPGPPGKEGLPGPQGPPGFQGLQGTVGEPGVPGPRGLPG
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 Nusbaum, C.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (20-NOV-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Sep 9, 2000 this sequence version replaced gi:6649269.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Direct Submission
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Wyman,D., Ye,W.J., Zimmer,A. and Zody,M.
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Brown,A., Castle,A., Colangelo,M., Collins,S., Collymore,A.
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Center clone name: 324
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t, A.F.A. & Green, P. (1996-1997)
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1. .17943
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38094: contig of 15570 bp in

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1920: contig of 1016 bp in
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13: gap of 100 bp

22424: contig of 4381 bp in length

24: gap of 100 bp
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20869: contig of 29077 bp in
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Homo sapiens chromosome 11 clone SEQUENCE SAMPLING. AC024368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattor:/egsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-911, 252-265, 2003-th/s.scs.81-45-503-917)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hattori,M., Ishii,K., Toyoda,A., Fuiiyama,A., Yada,T., Totoki,Y.,
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Location/Qualifiers
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/db_xref="taxon:9606"
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AUTHORS
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Boukhgalter, B., Brown, A., Burkett, G., Campopiano, A., Castle, A.,
Choepel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P.,
DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Domino, M., Doyle, M.,
Fenestor, J., Ferreira, P., FitzHugh, W., Forrest, C., Gage, D.,
Galagan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L.,
Grand-Pierre, N., Grant, G., Hagos, B., Heaford, A., Horton, L.,
Howland, J.C., Iliev, I., Johnson, R., Jones, C., Kann, L., Karatas, A.,
Klein, J., Landers, T., Largocque, K., Lehoczky, J., Levine, R.,
Lieu, C., Liu, G., Locke, K., Macdonald, P., Marquis, N., McCarthy, M.,
McEwan, P., McGurk, A., McKernan, K., Meheeters, R., Meldrim, J.,
Meneus, L., Mihova, T., Miranda, C., Melnga, V., Morrow, J., Naylor, J.,
Norman, C. H., O'Connor, T., O'Donnell, P., O'Neil, D., Olivar, T. M.,
Peterson, K., Pierre, N., Pisani, C., Pollara, V., Raymond, C.,
Riley, R., Rogov, P., Rothman, D., Koy, A., Santos, R., Schauer, S.,
Severy, P., Spencer, B., Stange-Thomann, N., Stojanovic, N.,
Travers, M., Trigilio, J., Vassillev, H., Viel, R., Vo, A., Wilson, B.,
Wu, X., Wyman, D., Ye, M. J., Young, G., Zainoun, J., Zimmer, A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted (28-FEB-2000) Whitehead Institute/MIT Center Research, 320 Charles Street, Cambridge, MA 02141, USA All repeats were identified using RepeatMasker: Smit, A.F.A. & Green, P. (1996-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Birren, B., Linton, L.,
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1 (bases 1 to 71044)
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                                                                                                                                                                                                                                                                                                                                                                                          will be sequenced to completion. In the event the record is updated, the accession number will
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Center clone name: 179_K_3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Web site: http://www-seq.wi.mit.edu
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5509: gap
6183:
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1495: contig of 697 bp in length
1595: gap of 100 bp
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J., Barna,N., Beda,F.,
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                      100 bp
g of 682 bp :
100 bp
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26774: contig of 693 bp
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1646: contig of 686 bp
6560: gap of 100 bp
17250: contig of 690 bp
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28355: contig of 6
1455: gap of 10
29145: contig of 6
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2117: gap of
22815: contig c
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23609: contig c
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31535: contig (
635: gap of
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043: gap of 100 bp
30745: contig of 700
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34694: contig (
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18836: contig of 696 bp
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15674: contig of 693 bp
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10140: contig of 688
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20425: contig
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NOTE: This is a 'working draft' sequence. It currently consists of 33 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555,
Japan (E-mail:hattori@gsc.riken.go.jp,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published Only in DataBase (2000)

2 (bases I to 187635)

Hattori, M., Ishii, K., Toyoda, A., Taylor, T.D., Hong-Seog, P.,
Fujiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  URL:http://hgp.gsc.riken.go.jp/,
Fax:81-42-778-9924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H., Homo sapiens 187,635 genomic DNA of 18p11.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          On May 31, 2000 this sequence version replaced gi:6997772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (05-JAN-2000) Masahira Hattori, The Institute of Physical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HTG; HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens DNA, clone:RP11-815L4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DRAFT SEQUENCE,
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                                                                                                                                                                                                                                                                                                                                                                                  Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
----- Project Information
Center project name: HumDraft18
Center clone name: RP11-815L4
                                                                                                                                                                                                       Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0.990329 Consensus quality: 167192 bases at least Q40 Consensus quality: 177020 bases at least Q30 Consensus quality: 182105 bases at least Q20
                                                                                                                                                           Insert size: 184435; sum-of-contigs
Quality coverage: 4.35x in Q20 bases; sum-of-contigs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome Center
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel:81-42-778-9923
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and Sakaki,Y.
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77449: ....
7949: gap of
8798: contig of 984y
...
8798: gap of
100 bp
11 19510: contig of 11612 bp in length
199610: gap of
11 107273: contig of 7663 bp in length
274 107373: gap of
100 bp
13190 113289: gap of
120559: contig of 7270 bp in length
120560 120659: gap of
120660 126658: gap of
126669 126568: gap of
12666 126568: gap of
12666 131619: contig of 5815 bp in length
131620 131719: gap of
131620 131719: gap of
131621 136910: gap of
136811 136910: gap of
13925: contig of 5991 bp in lengt
13925: contig of 5091 bp in lengt
13925: contig of 3015 bp in le
13926 140025: gap of
14232: contig of 4207 bp in
14232: contig of 4207 bp in
14232: contig of 4207 bp in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          186446 187635 contig of 1190 bp in length Sequence updated (26-May-2000).

* NOTE: This is a 'working draft' sequence. It currently consists of 33 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                    2133 2143: gap of 100 bp 2143 42072: contig of 20640 bp in length 42073 42172: gap of 100 bp 42173 54336: contig of 12164 bp in length 54337 54436: gap of 100 bp 54437 66766: contig of 12330 bp in length 66767 66866: gap of 100 bp 66867 77849: contig of 10983 bp in length 77850 77949: gap of 100 bp 77950 67798: contig of 9849 bp in length 77850 7798: contig of 9849 bp in length 77950 67798: contig of 9849 bp in length
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177890 contig
179786 contig
181478 contig
182895 contig
184841 contig
186345 contig
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* 16881 168680: gap of 100

* 16881 171270: contig of 2590

* 171271 171370: gap of 100

* 171371 174092: contig of 2771

174093 174192: gap of 174093

174193 174093 174192: gap of 174193
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161885 161984:
164301
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152919 153018: gap of
153019 156399: contig of
156400 156499: gap of
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186346 186445: ga
186446 187635:
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140026. .144232
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182995: gap of 100 bp
184841: contig of 1846 h
184941: gap of 100 bp
186345: contig of 1404 h
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161884: contig of 2
161984: gap of 1
164301: contig of 2
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                                                         and Chemical Research (RIKEN), Genomic Sciences Cent
Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagat
Japan (E-mail:hattori@gsc.riken.go.jp,
URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923
Fax:81-42-778-9924)
                                                                                                                                                               Direct Submission
Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical Submitted (17-DEC-1999) Masahira Hattori, The Institute 
                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 178022)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 178,022 genomic DNA of 18pll.3
Published Only in DataBase (1999)
2 (bases 1 to 178022)
Hattori,M.; Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
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                                                                                                                                               Sagamihara, Kanagawa
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* NOTE: This is a 'working draft' sequence of the pieces
* consists of 20 contigs. The true order of the pieces
* is not known and their order in this sequence record is
* arbitrary. Gaps between the contigs are represented as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NOTE: This is a 'working draft' sequence. It currently consists of 20 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                          * runs of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           as soon as it is available and the accession number will be
                                                                                                                                                                                                                                                                                         as soon as it is available and the accession number will be preserved.
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149151
156206
162149
165219
165219
167581
170087
172010
172418
174764
176372
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Center project name: HumDraft18
Center clone name: RP11-683J11
                   110069 110168: gap of 100 bp
110169 122716: contig of 12548 bp in
122717 122816: gap of 100 bp
122817 133089: contig of 10273 bp in
133090 133189: gap of 100 bp
133190 141206: contig of 8017 bp in 1
                                                                                                                                                                                                             24384 4687
46876 46975:
46976 6505
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46976
65159
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122817
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequencing vector: PCR products; 100% of Chemistry: Dye-terminator ET amersham; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Web site: http://hgp.gsc.riken.
Contact: hattori@gsc.riken.go.j
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center: RIKEN Genomic Sciences Center(GSC)
Center code: RIKEN
                                                                                                             46876 46975; gap of 100 bp
46976 65058; contig of 18083 bp in length
65059 65158; gap of 100 bp
65159 81322; contig of 16164 bp in length
81323 81422; gap of 100 bp
81423 98823; contig of 17401 bp in length
98824 98923; gap of 100 bp
98924 110068; contig of 11145 bp in length
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                                                                                                                                                                                                                                                           1 24283: contig of 24283 bp in 24284 24383: gap of 100 bp
    141306:
22816: gap of 100 bp in 133089: contig of 10273 bp in 33189: gap of 100 bp in 141206: contig of 8017 bp in 141206: gap of 100 bp
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46976. .65058
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174764. .176271
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172010. .172317
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122817. .133089
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/db_xref="taxon:9606"
/chromosome="18"
                                                                                                         /note="assembly_fragment"
34911 c 36303 g 50935
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162149. .165118
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165219. .167480
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CE 1 (bases 1 to 188255)

RS Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Tottoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 188,255 genomic DNA of 18p11.3

AL Published Only in DataBase (1999)

CE 2 (bases 1 to 188255)

E 2 (bases 1 to 188255)

RS Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Direct Submission

AL Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCGGCAC
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Homo sapiens chromosome 18 clone RP11-839023
DRAFT SEQUENCE, 32 unordered pieces.
                                                                                                                                          On May 31, 2000 this sequence version replaced
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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                                            Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
                                                                                             Center code: RIKEN
Center project name:
                                                                                                                 Center: RIKEN Genomic
                           ----- Project
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Sequence updated (06-Jan-2000)
Sequence updated (26-May-2000)
* NOTE: This is a 'working draft' sequence. It currently
* consists of 32 contigs. The true order of the pieces
* is not known and their order in this sequence record is
* rarbitrary. Gaps between the contigs are represented as
* runs of N, but the exact sizes of the gaps are unknown.
* This record will be updated with the finished sequence
* as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
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                           1 16096: contig of 16096 bp in 16097 16196: gap of 1793 bp in 16197 33788: contig of 1793 bp in 13790 33889: gap of 17912 bp in 13890 51010: contig of 17112 bp in 51011 5110: gap of 100 bp in 63558: contig of 12448 bp in 63559 6358: gap of 100 bp 63559 6358: gap of 100 bp 63559 75156: gap of 100 bp 100557 75156: gap of 100557 75156: gap
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143055: contig of 9
143155: gap of
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177118: contig
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167066: cont
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Search completed: March 21, 2003, 06:43:48 Job time: 3104.5 secs
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119302. .126582
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153187. .158921
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INFORMATION FOR SEQ ID NO: 60:
SEQUENCE CHARACTERISTICS:
LENGTH: 810 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: Linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "Synthetic"
US-08-642-255-60
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120 ACTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCC 179

Query Match Best Local Similarity Matches 250; Conserv

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Score 121.6; DB 1; Length 810; Pred. No. 1.9e-23; 0; Mismatches 214; Indels 0;

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, Application US 5773249 FFORMATION: TT: EFRARI, Fra TI FERRARI, Fra INVENTION: Hig INVENTION: HIG INVENTION: Pro Proportion: FLEHR, HOH SA 4 Embarcadero California X: USA 94111-4187 READABLE FORM: TYPE: FLOPY d ER: IBM PC COMP ER: IBM PC COMP ER: TERNIT PC- READABLE FORM: TYPE: FLOPY d FRE: Patentin Re APION NUMBER: DATE: FICATION LATA ATION NUMBER: NOE/DOCKET NUMBER: NO		6.000000000000000000000000000000000000	0
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2255  Colymers  TEST, ALBRITT TEST, Suite 3400 #1.0, Version #2,255	ALIGNMENTS	-09-134-001C- -09-134-001C- -09-134-001C- -09-140-804-1 -09-453-702B- -09-453-702B- -09-453-702B- -09-143-702B- -09-143-702B- -08-175-155-6 -08-477-509B- -08-642-255-9 -08-397-633A- -08-482-085B-	US-08-159-784-1 US-09-453-702B-6 US-09-404-879A-3 US-09-134-001C-6
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US-08-642-255-50
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                                                                                                       REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A555
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8770
TELEFAX: (415) 494-8771
TELEFAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 50, Application US/08642255 Patent No. 5773249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
                                                                                                                                                                                                                                                 FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, Bertram I
                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
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CITY: 9
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                                    TOPOLOGY:
     DESCRIPTION:
                                                         STRANDEDNESS:
                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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                                                                : 756 base pairs
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US-08-655-086-1
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GENERAL INFORMATION:
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                                                                        APPLICATION NUMBER: US/08/
FILING DATE: 03-JUN-1996
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: STEEN, JEFFREY S.
REGISTRATION NUMBER: 32,06
                                           REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0.
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
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APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                         STATE: N
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CITY: UNIONDALE
            TELEFAX:
                                                                                                                                                                                                                                                              ZIP:
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                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGGCCCATCAGGAGCG
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CONNOLLY, KEVIN
               516-228-8516
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BUECHTER, DOUGLAS
                                                                                                                                                                                  PatentIn Release #1.0, Version
                                                                                                                                                                                                                                                                          SD
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                               516-228-8484
SEQ ID
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                                                                                                                                                                                                                                                                                                                         BOULEVARD
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61 CCTGGACCGGCTGCTCCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGA 120
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                                                                                                                                                                                                                                                                                                                        Length 432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 106; DB 4; Length 16
Pred. No. 4.1e-19;
0; Mismatches 205; Indels
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Pred. No. 2.3e-19;
0; Mismatches 185;
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APPLICANT: THE VICTORIA UNIVERSITY OF MANCHESTER
TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: d087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PATENTIN Ver. 2.0
        20,015
R: A55556-3/BIR
                                                                                                                                                                                                                                       MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19, Application US/09029348 Patent No. 6171827
                          REFERENCE/DOCKET NUMBER: ASTELECOMMUNICATION INFORMATION
                                                          TELEPHONE: (415) 494-8700 TELEFAX: (415) 494-8771 TELEEX: 910 277299 FHT UR INFORMATION FOR SED ID NO. 48: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                      10.3%;
54.0%;
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52.8%;
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                                                                                                                                                          LENGTH: 432 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                               Conservative
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Best Local Similarity 52.8
Matches 229; Conservative
          REGISTRATION NUMBER:
                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                           TOPOLOGY:
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                                                                                                                                                                                                                                                                                  US-08-642-255-48
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Best Local S
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                                                                                                                                                                                                                                                                            104 CIGGICCCCAAGGCIICCCAAGGCIICCAAGGICCCCCIGGIGAGCCIGGCGAGCCIGGA 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAGGATTGCCCGGAACAGCTGGCCTCCCTGGAATGAAGGGACACAGAGGTTTCAGTGGT 343
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APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                     Indels
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                                                                                                                                                            Score 113.6; DB 1;
Pred. No. 5e-21;
0; Mismatches 224;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/642,255
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Patent No. 5773249
GENERAL INFORMATION:
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                                                                                                                                                            11.1%;
52.5%;
SEQUENCE CHARACTERISTICS:
LENGTH: 3181 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLLOGY: unknown
MOLECULE TYPE: CDNA
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                                                                                                                                                          Query Match 11.1'
Best Local Similarity 52.5
Matches 248; Conservative
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
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                                                                                                                   US-08-655-086-1
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                                                                   ACTGGCAACAAGGACAGAAAGGAGAGAGAGGGGGGGGGCCTGGCACCTGGCCCTGCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Reeders, Stephen T.
APPLICANT: Zhou, Jing
TITLE OF INVENTION: Collagen COL4A6: Gene, Protein and Method
TITLE OF INVENTION: of Detecting Collagen Deficiency
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN RELease #1.0, Version #1.25
CURRIY APPLICATION DATA:
APPLICATION NUMBER: US/08/494,168
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3000 K Street, N.W., Suite 500
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APPLICATION NUMBER: US 08/112,465
FILING DATE: 27-AUG-1993
ATTORNEY/AGENT INFORMATION:
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COUNTRY: USA
Z1P: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
TYPE: Floppy disk
TYPE: Floppy disk
TYPE: Ploppy disk
TYPE: Ploppy disk
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 904136
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
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CLASSIFICATION: 435
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2440 AGACTCTGGCCTTCCAGGACTCAAGGGTGTGCACGGGAAGCCTGGCTTACTAGGCCCCAA 2499
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          243 GGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATC
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TITLE OF INVENTION: Polynucleotides
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Yale University, Office of Cooperative Research
STREET: 246 Church Street
                                                                                                                             join(2..82, 86..97, 101..4399, 4403..4420, 4424
..4465, 4469..4876, 4880..5101)
                                                                                                                                                                                                                          Length 5102;
                                                                                                                                                                                                                                                                               0; Mismatches 200; Indels
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MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
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FILING DATE: 11/30/90
CLASSIFICATION: 424
PRIOR APPLICATION A7A: NO. 5424408 applicable
ATTORNEY/AGENT INFORMATION:
NAME: Barth, Richard S.
REGISTRATION NUMBER: 28180
REFERENCE/DOCKET NUMBER: 900983/RB
                                                                                                                                                                                                                             Score 100; DB 1;
Pred. No. 2.8e-17;
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                                                                                                                                                                                                                             Query Match 9.7%;
Best Local Similarity 52.4%;
Matches 220; Conservative
                          double
TYPE: nucleic acid
STRANDEDNESS: doub.
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                                               TOPOLOGY: linear
FEATURE:
NAME/KEY: CDS
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COCATION:
US-08-494-168-1
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127 GGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCTGGCCCA 186
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APPLICANT: Morrison, Karen E
APPLICANT: Morrison, Karen E
APPLICANT: Houson, Billy G
TITLE OF INVENTION Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 9512638
CURRENT APPLICATION NUMBER: US/09/167,364
CURRENT FILING DATE: 1998-10-07
EARLIER APPLICATION NUMBER: 08/39989
EARLIER PILING DATE: 1995-03-07
NUMBER OF SEQ ID NOS: 25
                                                                                                                                                                                                                                                                                                                                                Length 1416;
                                                                                                                                                                                                                                                                                                                                            9.7%; Score 99.6; DB 2; Length 1 ilarity 51.6%; Pred. No. 2e-17; Conservative 0; Mismatches 214; Indels
                   CURRENT APPLICATION NUMBER: US/08/399,889B
CURRENT FILING DATE: 1995-03-07
EARLIER APPLICATION NUMBER: 07/621091
EARLIER FILING DATE: 1990-11-30
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-167-364-1

Sequence 1, Application US/09167364

; Patent No. 6007980

; GENERAL INFORMATION:
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    FILE REFERENCE: 951263A
                                                                                                                                                                                                                                                     ; NAME/KEY: CDS
; LOCATION: (1)..(1416)
US-08-399-889-1
                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                              TYPE: DNA ORGANISM: Calf
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Best Local Simi
Matches 228;
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APPLICANT: Reeders, Stephen T
APPLICANT: Mortison, Karen E
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9.7%; Score 99.6; DB 1; Length 1416;
51.6%; Pred. No. 2e-17;
tive 0; Mismatches 214; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No. 5424408 known
: No. 5424408 known
ION: No. 5424408e
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                                                                                                                                                                                                                                                                                                                 STRAIN: Unknown
INDIVIDUAL ISOLATE: Unknown
DEVELOPMENTAL STAGE: Unknown
TELECOMMUNICATION INFORMATION:
                                                  TELEX: 236268
INFORMATION FOR SEO ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 1416 base pairs TYPE: Nucleic acid
                                                                                                                                                                                       TOPOLOGY: Linear
MOLECULE TYPE: CDNA tO MRNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                 CELL TYPE: Whole kidney IMMEDIATE SOURCE: LIBRARY: Bovine lens CDNA
                      TELEPHONE: (212) 972-14
TELEFAX: (212) 370-1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 228; Conservative
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POSITION IN GENOME: NO.
CHROMOSOME/SEGMENT: NO.
PUBLICATION INFORMATION:
US-07-621-091G-1
                                                                                                                                                                      Double
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Best Local Similarity
                                                                                                                                                                                                                                                                                                  ORGANISM: Calf
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                                                                                                                                                                 STRANDEDNESS:
                                     TELEFAX:
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US-08-399-889-1
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343 CCAGGCATGAAAGGGAAGAAGGGTAATTCAGGATTTCCAGGACCACCTGGACCTCCAGGG 402
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MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 70 Kb storable
COMPUTER: IBM PS/2, Model 35 SX
OPERATING SYSTEM: DOS 5.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: TRV
TELECOMMUNICATION INFORMATION:
TELEPHONE: (216) 861-5582
TELER: (216) 241-1666
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                      547 CCTGGCCCATCAGGAGCGGTGG 568
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Nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
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STATE: Ohio
COUNTRY: U.S.A.
ZIP: 44114-2518
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US-08-392-367B-1
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                                                                                                                                                                                                                                                                                                            247 GAGAGAGCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAA 306
                                                                                                                                                                                                                                                                                                                                403 CAAAGTGGACCAAAAGGACCACCTGGAGAGCCTGGCACAGTGAAGATCATC 462
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                                                                                                                                                                                                                                    187 ACTGGCAACAAGGGACAGAAGGAGAGAAGGGGGAGCCTGGACCACCTGGCCCTGCGGGT
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Patent No. 6277558
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Hudson: Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 95-1263-C
CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn Ver. 2.0
                                                                                          Length 1416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9.7%; Score 99.6; DB 4; Length 1416; 51.6%; Pred. No. 2e-17;
                                                                                      Score 99.6; DB 3; Length 1.
Pred. No. 2e-17;
0; Mismatches 214; Indels
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                                                                                        9.7%;
                                                                                      Query Match 9.7
Best Local Similarity 51.6
Matches 228; Conservative
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                                 (1)..(1416)
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; LOCATION: (1)..(1416)
US-09-439-897-1
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             ; NAME/KEY: CDS
; LOCATION: (1).
US-09-167-364-1
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LENGTH: 1416
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Matches 228;
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427 CCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGACCTCGG 486
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                                                                                                           GGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCC
                                                                                                                                                                                                                  AGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGCCCTCAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         No. 5691197el Macrophage Receptor with
a Collagenous Domain and the
Polypeptide Chain Encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Trygyason, Karl
APPLICANT: Elomaa, Outi
APPLICANT: Kangas, Maarit
TTLE OF INVENTION: An Insolated DNA Sequence For Patent No. 5691197
TITLE OF INVENTION: a Collagenous Domain and the TITLE OF INVENTION: a Collagenous Domain and the TITLE OF INVENTION: POlypeptide Chain Encoded by TITLE OF INVENTION: such a Sequence
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Word Perfect 5.1
                                                                                                                                                                                                                                                                                          STRANDEDNESS:
                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-555-669-11
                                                                                                                                                                                                                                                       LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/08893467A
Fatent No. 6063901
GENERAL INFORMATION:
APPLICANT: Trygyvason, Karl
APPLICANT: Elomaa, Outi
TITLE OF INVENTION: Maritt
FILLE OF INVENTION: No. 6063901e1 Macrophage Receptor with
TITLE OF INVENTION: a Collagenous Domain and the
TITLE OF INVENTION: Polypeptide Chain Encoded by
TITLE OF INVENTION: Such a Sequence
TITLE OF INVENTION: Such a Sequence
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                    Query Match 9.7%; Score 99.4; DB 1; Length 1868; Best Local Similarity 51.5%; Pred. No. 2.6e-17; Matches 229; Conservative 0; Mismatches 216; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Fay, Sharpe, Beall, Fagan, ADDRESSEE: Minnich & McKee
STRANDEDNESS: Single
TOPOLOGY: Linear
MOLECULE TYPE: Nucleotide-genomic DNA
HYPOTHETICAL: No. 5691197 relevant
ANTI-SENSE: No. 5691197 relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 44114-2518
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 720 Kb storable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        544 CCTCCTGGCCCATCAGGAGCGGTGG 568
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PS/2, OPERATING SYSTEM: D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cITY: Cleveland STATE: Obi-
                                                                    ; ANTI-SENSE:
US-08-392-367B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-893-467A-1
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1081 CCAGGCCCTCAAGGTGCACCAGGACTTTCAGGTGCCAAGGGTGAGCCAGGACGCACTGGT 1140
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244 GGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCT 303
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 9.7%; Score 99.4; DB 3; Best Local Similarity 51.5%; Pred. No. 2.6e-17; Matches 229; Conservative 0; Mismatches 216;
                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Minnich, Richard J.
REGISTRATION UNDRER: 24,175
REFERENCE/DOCKET NUMBER: TRV 2 009
TELEPONMUNICATION INFORMATION:
TELEPHONE: (216) 241-166
TELEX: (216) 980162 \( \)
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: Linear
MOLECULE TYPE: Nucleotide-genomic DNA
HYPOTHETICAL: No. 6063901 relevant
US-08-893-467A-1
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STREET: 1155 Avenue of the Americas
DATA:
R: US/08/893,467A
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                                                                                                                                                                                                                                                                                                                                                                      1868 base pairs
                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid
EDNESS: Single
                                                                               CLASSIFICATION: 435
                           APPLICATION NUMBER:
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GENERAL INFORMATION:
6127523
                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY:
; LOCATION:
US-09-073-663-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 99.4; DB 1; Length 2:
Pred. No. 3e-17;
0; Mismatches 216; Indels
                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/555,669
                                                                                                                                        FILING DATE: 13-NOV-1995
CLASSIFICATION: 435
TORNEY AFFERM
                                                                                                                                                                                                                                         8389-030
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US-09-073-663-11
; Sequence 11, Application US/09073663
                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Halluin, Albert P.
REGIGSTRATION NUMBER: 25,227
REFRENCE/CDCKET NUMBER: 8389
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-3660
                                                                                                                                                                                                                                                                                TELEFAX: 415-854-3694
TELEY: 6644 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 2543 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 51.54
Matches 229; Conservative
                                                         COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: 47..2098
                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: unknown MOLECULE TYPE: CDNA
               New York
New York
                            USA
                                          10036
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LOCATION:
US-08-555-669-11
                            COUNTRY:
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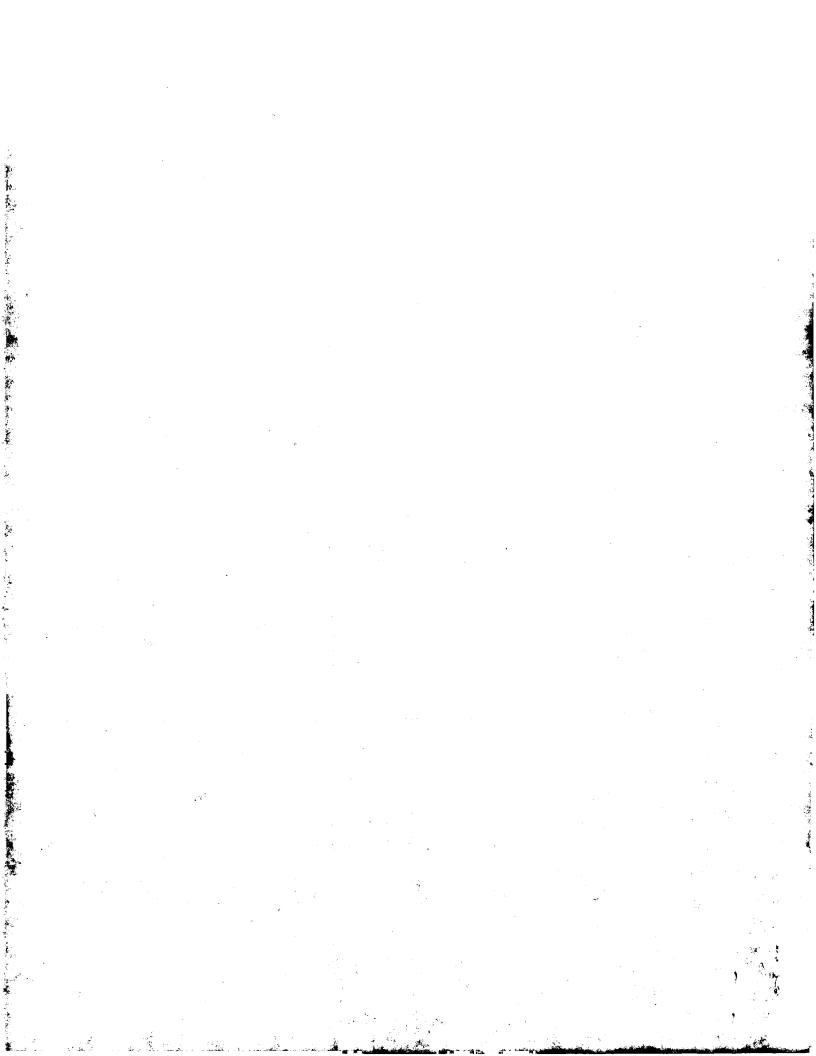
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124 CAAGGTCCACCGGGCCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGC 183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244 GGTGAGAGGCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 9.7%; Score 99.4; DB 3; Length 2543; Best Local Similarity 51.5%; Pred. No. 3e-17; Matches 229; Conservative 0; Mismatches 216; Indels 0
APPLICANT: Brewton, Richard G.
PSPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Benjamin Aaron Adler, Ph.D., J.D.
REGISTRATION NUMBER: 35,423
REFERENCE/DOCKET NUMBER: D5913D
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh OS 8.1
SOFTWARE: Microsoft WORD for Macintosh
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,663
                                                                                                                               ADDRESSEE: McGregor & Adler, LLP
STREET: 8011 Candle Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (713) 777-2321
TELEFAX: (713) 777-6908
INFORMATION FOR SEQ ID NO: 11:
SEGUENCE CHARACTERISTICS:
LENGTH: 2543 base pairs
                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: unknown
                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: McGregor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47..2098
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                                                                                                                                                                                    CITY: how.
STATE: Texas
COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
9.5%; Score 97.6; DB 4; Length 4359;
Best Local Similarity 52.3%; Pred. No. 1.2e-16;
Matches 272; Conservative 0; Mismatches 234; Indels 14
                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. 6426186 331365 (1553795CBL)
US-09-484-970B-4
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                                                                                                 US-09-484970B-

SQUENCE 4, Application US/09484970B
Patent No. 6426186
GENERAL INFORMATION:
APPLICANT: JONES, Karen A.
APPLICANT: VOLKmuth, Wayne
TITLE COF INVENTION: BONE REMODELING GENES
FILE REFERENCE: PB-0014 US
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SEQ ID NO 4
SEQ ID NO 4
                 1004 GAGGCTGGTCGCAACGGTGCTCCGG 1028
544 CCTCCTGGCCCATCAGGAGCGGTGG 568
                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                         RESULT 15
US-09-484-970B-4
                                                                                                                                                                                                                                                                                                            LENGTH: 4359
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completed: March 21, 2003, 08:25:53 le: 48.1652 secs

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March 21, 2003, 01:57:56 ; Search time 156.339 Seconds
  (without alignments)
  5089.177 Million cell updates/sec
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                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                   538826 seqs, 387737923 residues
                                                                                                                                     US-09-763-712A-1_COPY_670_1695
1026
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                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                   OM nucleic - nucleic search, using sw model
                                                                                                                                                                                          IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
GenCore
Copyright (c) 1993
                                                                                                                                                                                                                                                                                          length: 0
length: 2000000000
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Maximum DB seq
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

55. 40. 10. 112. 14. 14.

SUMMARIES

,	Description	Sequence 198, App	Sequence 782, App	· in	Sequence 57, Appl	Sequence 57, Appl	Sequence 64, Appl	Sequence 42, Appl	Sequence 3947, Ap	Sequence 206, App	Sequence 206, App	Sequence 22, Appl	Sequence 33, Appl	Sequence 961, App	Sequence 255, App	Sequence 786, App	Sequence 2094, Ap	Sequence 6, Appli	Sequence 762, App	Sequence 104, App
	ID	US-09-745-763-198	US-09-954-456-782	US-09-880-107-3946	US-09-924-340-57	US-09-992-600A-57	US-09-925-302-64	US-09-925-301-42	US-09-880-107-3947	US-09-925-299-206	US-09-925-299-206	US-10-044-090-22	US-10-001-887-33	US-09-954-531-961	US-09-964-824A-255	US-09-954-456-786	US-09-880-107-2094	US-09-919-497-6	US-09-954-456-762	US-10-044-090-104
	DB	10	10	10	6	6	10	10	10	6	10	12	6	6	10	10	10	10	10	12
	Query Match Length DB	2930	6728	6728	1133	1133	2691	2192	5086	5145	5145	5432	4908	2542	2542	5416	5416	6158	6158	4149
dф	Query Match	99.8	10.8	10.8	10.8	10.8	10.7	10.4	10.4	10.4	10.4	10.4	10.4	10.3	10.3	10.3	10.3	10.3	10.3	10.2
	Score	1024.4	111	111	110.6	110.6	109.4	107.2	107	107	107	107	106.8	106	106	105.4	105.4	105.2	105.2	104.2
	Result	. 4	7	e	4	2	9	7	æ	6	10	11	12	13	14	15	16	17	18	19

NAME: Sprunger, Suzanne A.
REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 496-8284
TELEPRAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:

LENGTH: 2930 base pairs TYPE: nucleic acid

20	7		48	10	-09-925-302-	Sequence 247,	A
21	01.		22	10	-09-954-456-72	Sequence 725,	V
22	01.		69	12	5-10-044-090-44	œ	A
23	8		15	σ	US-10-001-835-98	Sequence 98, Ap	App
24	7	•	52	10	-09-880-107-36	Sequence 3685,	
25	ď.		48	10	9-92	Seguence 246,	K
26	5		79	σ	9-978-295A-61	613,	Ap
27	ď.		79	6	3-6-€	613,	Αp
28	5		79	σ	9-678	613,	Αp
29	5		79	6	US-09-999-832A-613	613,	Ap
30	5.		79	σ	9-61€	613,	Αp
31	5.		79	σ	0-174	331,	Αp
32	95.2	9.3	1797	6	-10	331,	Αp
33	5		79	0	-175	331,	Αp
34	5.		79	σ	US-10-173-706-331	331,	Αp
35	ď.		79	σ	-17	_	Ap
36	S.		79	σ	-17	331,	Ap
37	5.		79	6	-176	331,	Αp
38	5		79	σ	-10-176	331,	Αp
39	5		79	6	-10-17	331,	Αp
40	δ.	•	φ	σ	-10 - 18(	331,	Αp
41	5.		79	σ	-10-18(	331,	Αp
42	ď.	•	79	6	-17	331,	Αb
43	δ.		79	σ	-10-17	331,	Ap
44	•	•	6	σ	0-17	331,	Αp
45	υ.	•	79	6			Αp
					ALIGNMENTS		
RESULT 1 US-09-745	- 1	86					
; Sequence ; Patent No	H :	98, Application US/0974576 US20020065394A1	ation U 5394A1	s/09	1745763		
	APPLICANT		, sqc	Kenneth	th		
•••		MC(	McCoy, Jol	John M.	7		
••		ק	vallie,	EGWALG	ard K.		

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Merberg, David
Treacy, Maurice
Spaulding, Vikk
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <UNKnown>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc. STREET: 87 CambridgePark Drive CITY: Cambridge
Collins-Racie, Lisa A.
                                                                                                                                                                                                                                                                                                                                                                      Floppy disk
                                                                                                                                                             NUMBER OF SEQUENCES: 219
                     Evans, Chery
                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                  COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10; Length 2930;
                                                        1; Indels
                                        Score 1024.4; DB :
Pred. No. 1.7e-271
                                                        0; Mismatches
TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 198:
                                       99.88;
                                               Best Local Simitation
Matches 1025; Conservative
                      US-09-745-763-198
                                        Query Match
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APPLICANT: Young, Paul
TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using
TITLE OF INVENTION: Sets
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                      2226 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGAGAGACAGTACTGTCATCT 2285
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CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCCAACTGGCAACAAGGACAGAAAGGAGAGAAAGGGGGGAGCCTGGACCACCTGGCCCTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE REFERENCE (89290-76

CURRENT APPLICATION NUMBER: US/09/954,456

CURRENT FILING DATE: 2001-09-18

PRIOR FILING DATE: 2000-09-18

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR APPLICATION NUMBER: US/60/234,052

PRIOR FILING DATE: 2000-09-25

PRIOR FILING DATE: 2000-09-26

PRIOR FILING DATE: 2000-09-26

PRIOR FILING DATE: 2000-09-26

PRIOR FILING DATE: 2000-09-26

PRIOR PRIOR APPLICATION NUMBER: US/60/235,637

PRIOR FILING DATE: 2000-09-26

PRIOR PRIOR DATE: 2000-09-26

PRIOR PRILING DATE: 2000-09-26

PRIOR FILING DATE: 2000-09-26

PRIOR PRILING DATE: 2000-09-26

PRIOR PRILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,638

PRIOR FILING DATE: 2000-09-27

PRIOR PRILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,840

PRIOR PRILING DATE: 2000-09-27

PRIOR PRILING DATE: 2000-09-27

PRIOR PRILING DATE: 2000-09-27
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                                                                                                                                                                                                                                                                                           Sequence 782, Application US/09954456 Patent No. US20020115057A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.0 SEQ ID NO 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2000-09-27
NUMBER OF SEQ ID NOS: 2276
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nes 237; Conserv
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                                                                                                    GCATTA 1026
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LENGTH: 6728
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Matches
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1141 Greenergeenreergergengeng 1167
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SOFTWARE: JPatent
                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 476..964
NAME/KEY: 3'UTR
LOCATION: 965..1133
NAME/KEY: POLYA_signal
LOCATION: 1101..1106
                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo sapiens
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1118..1133
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                   SEQ ID NO 57
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AGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGAC 481
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                                                CTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCCG
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                                                                                                                                                                                                                                               Length 6728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 10.8%; Score 111; DB 10; Length 6
Best Local Similarity 53.0%; Pred. No. 3.7e-20;
Matches 237; Conservative 0; Mismatches 210; Indels
                                                                                                             GCCCTCCTGGCCCATCAGGAGCGGTGG 568
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                                                                                                                                                                                     Sequence 3946, Application US/09880107 Patent No. US20020142981A1
                                                                                                                                                                                                   Patent NO. CONTROL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Horne, Darci T.
APPLICANT: Vockley, Joseph G.
Scherf, Uwe
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ORGANISM: Homo sapiens
                                                                                                                                                             RESULT 3
US-09-880-107-3946
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                                                                     APPLICANT: Bejanin, Stephane
APPLICANT: Bejanin, Stephane
TILEOF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.022.REG
CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT APPLICATION NUMBER: US/09/924,340
FRIOR APPLICATION NUMBER: US/03/05,456
PRIOR PAPLICATION NUMBER: US/03/02,277
PRIOR PELING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR PLING DATE: 2001-06-29
PRIOR PLING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US/05/293,574
PRIOR APPLICATION NUMBER: US/05/293,574
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Sequence 57, Application US/09924340 Publication No. US20030027248A1 GENERAL INFORMATION:
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289 TGGCCCACCTGGCCCTCAAGCAGAAAGGCCAACGAAGGGATTCGAGGCCCATCAGGCCT 348
                                                                                                                                              381 CCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGCTTCCA 440
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                                                             321 CAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCCCAGTGGGGACCCAGG
                                                                                     349 GCCTGGCTCCCCTGGGCCACCGGGACTTCAGGGCCCCGCCGGTCTGGATGG
                                                                                                                                                                    441 GGGACTTCAGGGCACCGTTGGGGAGCCTGGGTGCCTGGACCTCGGGGACTGCCAGGCTT
                                                                                                                                                                                                                                                                                                              501 GCCTGGGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCCGGGCCCTTCTGGCCCATCAGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 64, Application US/09925302
Patent No. US20020044941A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ouery Match 10.7%; Score 109.4; DB 10; Best Local Similarity 54.4%; Pred. No. 6.2e-20; Matches 240; Conservative 1; Mismatches 197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/925,302
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 1999-03-12
PRIOR PLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
SOFTWARE: PatentIn Ver. 2.0
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NAME/KEY: misc feature
LOCATION: (2683)
COTHER INFORMATION: n equals a,t,g, or c
US-09-925-302-64
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NAME/KEY: misc feature
LOCATION: (2667)
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LOCATION: (2653)
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ORGANISM: Homo sapiens
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                                        90 GCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCACGGGCCCCAGGGGTCC 149
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                 501 GCCTGGGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCCCGGCCCTCCTGGCCCATCAGG
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US-09-992-600A-57

Sequence 57, Application US/09992600A

Publication No. US20030027161A1

GENERAL INFORMATION:
APPLICANT: Benjamin, Stephane
APPLICANT: Benjamin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
CURRENT APPLICATION NUMBER: US/09/992,600A

CURRENT RILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-00-06
PRIOR FILING DATE: 2001-00-06
PRIOR PRIOR PILING DATE: 2001-00-06
PRIOR FILING DATE: 2001-00-06
PRIOR PRIOR PILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/205,277
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-06-25
NUMBER OF SEQ ID NOS: 114
SEQ ID NO 57

LENGTH: 1133

LENGTH: 1133
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Pred. No. 1.8e-20;
0; Mismatches 229;
                                                                                                                           589 TGAACCTGGTGCCATGGGACCCCCAG 613
                                                                                                  561 AGGGGTGGTGCCCTGGCCGTGCAG 585
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Local Similarity 52.9%;
nes 267; Conservative (
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ORGANISM: Homo sapiens
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FEATURE:
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US-09-992-600A-57
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Best Local Sim:
Matches 267;
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FEATURE:
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                                    -GCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCT
                                                                                                                               GGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCCGGGCCCT
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                                                                                                                                                                                                                                                                                   GENERAL INFORMATION.

GENERAL INFORMATION.

APPLICANT: Rosen et al.

TITLE COF INVENTION: Nucleic Acids, Proteins and Antibodies.

TITLE COF INVENTION: Nucleic Acids, Proteins and Antibodies.

FILE REPRENCE: PA106

CURRENT APPLICATION NUMBER: US/09/925,301

CURRENT FILING DATE: 2001-08-10

PRIOR APPLICATION NUMBER: 60/124,270

PRIOR APPLICATION NUMBER: 60/124,270

PRIOR PILING DATE: 1999-03-12

NUMBER OF SEQ ID NOS: 1694

SOFTWARE: PATENTIN Ver. 2.0

SEQ ID NO 42

LENGTH: 2192
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                                                                                                                                                                                            GCCCTCCTGGCCCATCAGGA 561
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CTCCGGCCCCGTTGGACCTCCTGGTAATCCTGGAGCAAACGCCCTTACTGGTGCCAAGGG 1068
547 CCTGGCCCATCAGGAGCGG-TGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCGGCAAC 605
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OTHER INFORMATION: Genbank Accession No. US20020142981A1 274616
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APPLICANT: Scherf, Uwe
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.
TITLE OF INTYLION: Gene Expression Profiles in Liver Cancer:
FILE REFERENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR APPLICANION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-10-02
NUMBER OF SED ID NOS: 3950
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3947
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Pred. No. 4e-19;
0; Mismatches 235; Indels
                                                                                                                                  1109 GACTTCAGCTTCCTGCCCAGCCACCTCAAGA 1140
                                                                                                     GGAGGACAATGGCTGCCCGCCTCACTGGAAGA 637
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; OTHER INFORMATION: n = a or c or g or t
US-09-880-107-3947
                                                                                                                                                                                                                                                                                Sequence 3947, Application US/09880107 Patent No. US20020142981A1
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Best Local Similarity 51.3%;
Matches 248; Conservative (
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1012 CTCCGGCCCCGTTGGACCTCCTGGTAATCCTGGAGCAAACGGCCTTACTGGTGCCAAGGG 1071
1072 recrecerdecerrecedecerrecrededecercededecreceredacecededegrarrec 1131
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; Sequence 206, Application US/09925299
; Patent No. US20020055627A1
; GENERAL INFORMATION:
; TITLE OF INVENTION:
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PAIO2
CURRENT FILING DATE: 2001-08-10
; PRIOR FILING DATE: 2001-08-10
; PRIOR FILING DATE: 1999-03-12
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1556
; SOFTWARE: PATENTIN Ver. 2.0
; SEQ ID NO 206
; LENTH: 5145
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Best Local Similarity 51.3%; Pred. No. 4e-19;
Matches 248; Conservative 0; Mismatches 235;
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LOCATION: (17)
COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
LOCATION: (5126)
O'THER INFORMATION: n equals a,t,g, or c
LOCATION: (5143)
O'THER INFORMATION: n equals a,t,g, or c
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OTHER INFORMATION: n equals a,t,g, or
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   .012 CTCCGGCCCCGTTGGACCTCCTGGTAATCCTGGAGCAAACGGCCTTACTGCTGCTAGGG 1071
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       112 ACAGCCCGGTGCTCCTGGTGTGAAGGGTGAACCTGGTGCAAATGGAACTCC 771
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                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies TITLE REFERENCE: PA102 PROTEINS and Antibodies FILE REFERENCE: PA102 PROTEINS TITLE OF INVENTION: NUMBER: US/09/925,299 CURRENT FILING DATE: 2001-08-10 PRIOR APPLICATION NUMBER: PCT/US00/05883 PRIOR RELING DATE: 2000-03-08 PRIOR FILING DATE: 1999-03-12 NUMBER OF SEQ ID NOS: 1556 SUBJECT OF SEQ ID NOS: 1556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 10.4%; Score 107; DB 9; Length 51 Best Local Similarity 51.3%; Pred. No. 4e-19; Matches 248; Conservative 0; Mismatches 235; Indels
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) LOCATION: (3126)

OTHER INFORMATION: n equals a,t,g, or c

) NAME/KEY: misc_feature

) LOCATION: (5143)

OTHER INFORMATION: n equals a,t,g, or c

US-09-925-299-206
                                                                                                                                                                                                                                                                                                                       Sequence 206, Application US/09925299
Publication No. US20030040617A9
GENERAL INFORMATION:
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NAME/KEY: misc_feature
LOCATION: (17)
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OTHER INFORMATION: n equals
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LOCATION: (4)
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| 1189 AGC 1191
                                                                                                600 GGC 602
                                                                                                                                                                                                                                                               RESULT 9
US-09-925-299-206
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LENGTH: 5145
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APPLICANT: Recipon, Herve
APPLICANT: Cafferkey, Robert
APPLICANT: Cafferkey, Robert
APPLICANT: Sun, Yongming
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
APPLICANT: Liu, Chenghua
FITLE OF INVENTION: Compositions and Methods Relating to Breast Specific Genes of FILE REPERENCE: DEX-0269 201-11-20
CURRENT APPLICATION NUMBER: 60/249,998
PRIOR APPLICATION NUMBER: 60/249,998
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-20
RIOR FILING DATE: 2000-11-20
RIOR FILING DATE: 2000-11-21
NUMBER OF SEQ ID NOS: 137
SOFTWARE: Patentin version 3.1
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                                                                                           se 33, Application US/10001887
No. US20020155464A1
                                                                                                                                                                       Macina, Roberto
                                                                                                                                                     APPLICANT: Salceda, Susana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapien
US-10-001-887-33
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                                                                                                                               GENERAL INFORMATION:
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1522 AGC 1524
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US-09-954-531-961
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Best Local Simi
Matches 256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 33
LENGTH: 4908
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Sequence 22, Application US/10044090
Patent No. US20020137081a1
CENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL PROGram
SOFTWARE: PERL PROGram
SEQ ID NO 22
LENGTH: 5432
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                                     1162 ACCTGGTGCCCGTGCCAGTGATGGAAGTGTGGGTCCCGTGGGTCCTGCTGGTCCCATTGG 1221
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                                                                                       540 CGCCCTCCTGCCCCATCAGGAGGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 5432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 10.4%; Score 107; DB 12; Best Local Similarity 51.3%; Pred. No. 4.1e-19; Matches 248; Conservative 0; Mismatches 235;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens FEATURE:
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AGC 1194
                                                                                                                                                                 GGC 602
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US-09-954-456-786

; Sequence 786, Application US/09954456
; Sequence 786, Application US/09954456
; GENERAL INFORMATION:
; APPLICANT: Young, Paul
; TITLE OF INVENTION: Pets
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Pred. No. 5.1e-19;
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CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR APPLICATION NUMBER: US/60/23,617
PRIOR PELING DATE: 2000-09-18
PRIOR PELING DATE: 2000-09-20
PRIOR PELING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR PILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR PLILING DATE: 2000-09-25
PRIOR PLILING DATE: 2000-09-25
PRIOR PLILING DATE: 2000-09-25
PRIOR PLILING DATE: 2000-09-25
CURRENT APPLICATION NUMBER: US/09/964,824A CURRENT FILING DATE: 2001-09-27 PRIOR APPLICATION NUMBER: US/60/236,033 PRIOR FILING DATE: 2000-09-28 PRIOR FILING DATE: 2000-09-28 PRIOR FILING DATE: 2000-09-28 PRIOR PAPLICATION NUMBER: US/60/236,028 PRIOR FILING DATE: 2000-09-28
                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 583
SOFTWARE: PatentIn version 3.0
SEQ ID NO 255
LENGTH: 2542
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 10.3%;
Best Local Similarity 52.1%;
Matches 236; Conservative
                                                                                                                                                                                                                                                                                                                                                                 ) ORGANISM: Homo sapiens
US-09-964-824A-255
                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
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                                                                                                      TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancer TITLE OF INVENTION: Gene Sets

FILE OF INVENTION: Gene Sets

CURRENT APPLICATION NUMBER: US/09/954,531

CURRENT FILING DATE: 2002-05-02

PRIOR PLING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US/60/234,034

PRIOR PLING DATE: 2000-09-20

PRIOR PLING DATE: 2000-09-20

PRIOR PLING DATE: 2000-09-22

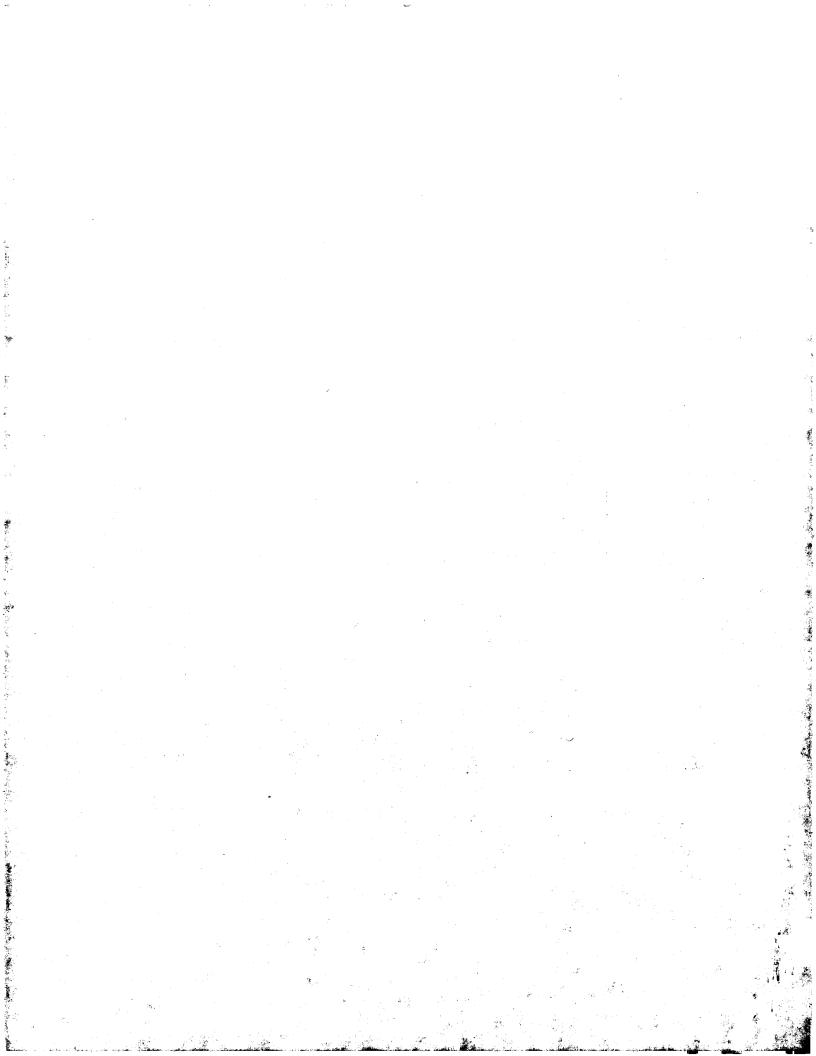
PRIOR APPLICATION NUMBER: US/60/234,509

PRIOR PLING DATE: 2000-09-22

PRIOR PLING DATE: 2000-09-22
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APPLICANT: Horrigan, Stephen
TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
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Pred. No. 5.1e-19;
0; Mismatches 217; Indels
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; Sequence 255, Application US/09964824A
; Patent No. US20020102531A1
        Application US/09954531
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52.1%;
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  Sequence 961, Application Patent No. US20020165180A1 GENERAL INFORMATION:
APPLICANT: Weaver, Zoe
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; ORGANISM: Homo sapiens
US-09-954-531-961
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                                 PRIOR FILING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,711
PRIOR APPLICATION NUMBER: US/60/235,711
PRIOR FILING DATE: 2000-09-27
NUMBER OF SEQ ID NOS: 2276
SOFTWARE: PATENTIN VERSION 3.0
SEQ ID NO 786
LENGTH: $416
FILING DATE: 2000-09-2b
APPLICATION NUMBER: US/60/235,638
                                                                                                                                                                                                                                                                                                          Query Match 10.3%;
Best Local Similarity 51.1%;
Matches 247; Conservative
                                                                                                                                                                                                                                             TYPE: DNA
CORGANISM: Homo sapiens
US-09-954-456-786
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Search compléted: March 21, 2003, 08:22:40 Job time : 175.339 secs



437.2 42.6 552 10 AW958053 415.8 40.5 601 10 BE290299 403.4 39.3 957 14 BQ955927 369.4 36.0 638 10 BB248064 351.4 34.2 500 14 BM676508	350 34.1 507 14 BM713891 343.8 33.5 808 14 BQ771366 311 30.3 33.9 AA304251 301.4 29.4 357 10 AW379436 297.2 29.0 517 9 AL543000	297 28.9 936 14 BQB91432 296 28.8 310 9 AA361740 271 26.4 350 9 AA012704 245.8 24.0 420 12 BE929813 213.8 22.8 429 12 BE929998.	23 21212 20:7 723 14 BQ887163 24 201 19:6 655 12 BG48931 25 200.8 19:6 345 9 A1742661 26 199:6 19:5 441 10 BB749743	185.2 18.1 591 13 B1445884 18.0 277 12 BF854320 183.4 17.9 254 13 B1010880	180.2 17.6 280 13 BL010883 178.8 17.4 286 12 BF854324 172.4 16.8 334 10 AW02141 170.4 16.6 309 14 W76214	35 159.8 15.6 281 12 BF684408 BF854408 MR2-EN009 36 151.2 14.7 465 10 AM240221 AM240221 Up30b07.y 37 144.4 14.1 504 14 K74397 K74387 yi57fil.rl 38 142.8 13.9 288 14 W72977 K74387 yi57fil.rl 39 135.6 13.2 432 9 Af613616 BM907108 BM907108 AGENCOURT 41 124.4 12.1 884 14 BM907108 BM907108 AGENCOURT 42 124.4 12.1 531 10 AV603727 AV603727 AV603727 43 123.8 12.1 608 10 AW918333 AW918333 EST349697 44 122.4 11.9 960 14 BQ220508 BIB28870 603075026	ALIGNMENTS	RESULT 1 BC009162 LOCUS BC009162 LOCUS DEFINITION Mus musculus, Similar to scavenger receptor with C-type lectin, Clone IMAGE:2811487, mRNA. ACCESSION BC009162 VERSION BC009162 VERSION RC009162 FTC. SOURCE ORGANISM Mus musculus ENkaryotta; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia: Eutheria; Rodentia; Sciurognathi; Muridae; Mus. REFERENCE 1 (bases 1 to 3305)	AUTHORS STRANSBERG, K.  TITLE Direct Submission JOURNAL Submitted (05-JUN-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA	REMARK NIH-MGC Project URL: http://mgc.nci.nih.gov COMMENT Contact: MGC help desk Email: cgapbs-r@mail.nih.gov Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys	CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Baylor College of Medicine Human Genome Sequencing Center Center code: BCM-HGSC Web site: http://www.hgsc.bcm.tmc.edu/cdna/
GenCore Copyright (c) 1993	OM nucleic - nucleic search, using sw model  Run on: March 21, 2003, 01:34:06 ; Search time 1346.02 Seconds  (without alignments) 12344.923 Million cell updates/sec	Title: US-09-763-712A-1_COPY_670_1695 Perfect score: 1026 Sequence: 1 atgcaacaagatttgatgagcagtactgtcatctgcatta 1026 Scoring table: IDENWITY NUC	Gapoi ned: 16154	Total number of hits satisfying chosen parameters: 32308132 Minimum DB seq length: 0 Maximum DB seq length: 2000000000	Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries	F:* em_estba:* em_esthum: em_estin:* em_estou:* em_estpl:* em_estpl:* em_estpl:* em_ptpl:* em_btc:* db_est1:*		14: gb est5:* 15: em_estfun:* 16: em_estfun:* 17: gb_gss:* 18: em_gss_hum:* 19: em_gss_lun:* 20: em_gss_lun:* 21: em_gss_lun:* 23: em_gss_lun:* 24: em_gss_lun:* 25: em_gss_lun:* 26: em_gss_lun:* 27: em_gss_lun:* 27: em_gss_lun:* 27: em_gss_lun:*	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.	% Query Score Match Length DB ID	1 800.4 78.0 3305 11 BC009162 BC009162 Mus muscu 2 556.4 54.2 861 14 BQ713873 BQ713873 AGENCOORT 3 525.4 51.2 668 14 BO674807 BQ674807 ACENCOORT C 4 475.4 46.3 967 9 AL568743

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TITLE
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BQ713873
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KEYWORDS
SOURCE
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                                                                Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 5 Row: h Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis
              Hulyk, S.W., Hale, S.M.,
Martin, R.G., Muzny, D.M.
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                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                  This clone has the following problem: incomplete processing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
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0
                                                                                                                                                                                                                                                                                                                                                         DB 11; Length 3305;
                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches 141; Indels
                                                                                                                                                                                                                                                                                                                                                                       .4e-179;
               × ; ;
                                                                                                                                                                                                                                /clone="IMAGE:2811487"
/tissue_type="Wammary tumor. Vold, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                  /note="Vector: pCMV-SPORT6"
757 c 760 g 757 t
                                                                                                                                                                                                                                                                                                                                                        Score 800.4;
Contact: amg@bcm.tmc.edu
dunaratne, P.H., Garcia, A.M., Lu,
Yoon, V.S., Kowis, C.R., Lawrence,
Richards, S., Gibbs, R.A.
                                                                                                                                                                                      /organism="Mus musculus"
/db_xref="taxon:10090"
/map="C57BL/6J"
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                                                                                                                                                        Location/Qualifiers
1. 3305
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11 Similarity 86.3%;
885; Conservative
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Best Local S
Matches 885
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

I (bases 1 to 861)
NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Emal: cgapbs r@mail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CDNA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LNL at:
http://image.llnl.gov
Plate: LLAM13721 row: n column: 01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2196 GGCCATGGGCCAGGAGAAGACTGTGCTTGATTTACGCAGGACAGTGGAATGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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Contract: mouetc strausperg, Pn.D.

Email: cgapbs-rémail.nih.gov
Tissue procurement: ATCC
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2377 row: c column: 09
High quality sequence stop: 656.
Location/Qualifiers
I. .66
/ Organism="Memo sapiens"
/ Ab_xref="taxon:9606"
/ Clone="Ib="MIH_MGC_102"
/ Clone="Ib="MIH_MGC_102"
/ Ab_xref="taxon:9606"
/ Clone="Lib="MIH_MGC_102"
/ Ab_bost="DHIOB (phage-resistant)"
/ Ab_host="DHIOB (phage-resistant)"
/ Ab_host="DHIOB (phage-resistant)"
/ Action="Corpan: salivary gland; vector: pOTB7; Site_I: XhoI;
Site_2: EcoRI; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using Ab-CDNA
synthesis kit (Stratagene) and Superscript II RT (Life
Technologies). Note: this is a NIH_MGC Library."
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NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 525.4; DB 14; Length 668;
Pred. No. 3e-114;
); Mismatches 1; Indels 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    51.2%;
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Best Local Similarity 99.88
Matches 526; Conservative
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ORIGIN
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AUTHORS
TITLE
JOURNAL
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AGENCOURT_8035172 NIH_MGC_102 Homo sapiens cDNA clone IMAGE:6212672
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 668)
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                                                                                              74 AGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCAC 133
                                                                                                                                                       CGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCAACTGGCA 193
                Gaps
                                                         14 TGATGAGGTCAAAGTTAGACACTGAAGTGGCCAACTTATCAGTGGTTATGGAAGAGATGA 73
                                         TGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATTATGGAAGAAATGA 73
                                                                                                                                                                                                            194 ACAAGGGACAGAAAGGAGAGAGAGGGAGGCCTGGTCCACCTGGCCCTGCGGGTGAGAGGG
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              5
              Indels
ed. No. 1.4e-121;
Mismatches 132;
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82.8%;
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BQ674807
              647; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5;
                           AL568743 LTI_FL002_PL1 Homo sapiens cDNA clone CSODE005XH04 3 prime
                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 967)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Unpublished (2001)
Contact: Genoscope
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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BP 191 91006 EVRX cedex - France
Email: segreféqenoscope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               686 AGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCATAAACACTAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      46.3%; Score 475.4; DB 9; Length 967; 96.7%; Pred. No. 2.6e-102;
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                                                                                                                                                                                                                                                                                                       1. .967
/organism="Homo sapiens"
/db_xxef="Laxon:9606"
/clone="CSODE005YH04"
/clone_lb="LTI_FL002_PL1"
/lab_host="DH109"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Mismatches
                                                                                  AL568743.1 GI:12923387
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                                                           mRNA sequence.
                                                                                                                                  Homo sapiens
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/organism="Mus musculus"
/strain="C5PBL/6J"
/db_xref="taxon:10090"
/db_xref="taxon:10090"
/clone="Inb="NoI_C6AP_Man5"
/tissue_type="tumor, gross tissue"
/dev_statge="7 months"
/dev_statge="7 months"
/dev_statge="ph10B"
/note="Organ: mammary; Vector: pcMV-SPORT6; Site_1: SalI;
/note="Organ: mammary; Vector: pcMV-SPORT6; Site_1: SalI;
/note="Organ: cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Robin Humphreys,
NIH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. E. (Dases 1 to 906)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                         906 bp mRNA linear EST 21-AUG-2001
603172765F1 NCI_CGAP_Mam5 Mus musculus CDNA clone IMAGE:5251888 5',
mRNA sequence.
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926 CTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTCAATAACTTCA
                        Ouery Match 45.1%; Score 462.6; DB 13; Length 906; Best Local Similarity 81.7%; Pred. No. 2.8e-99; Matches 597; Conservative 0; Mismatches 124; Indels 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               found through the I.M.A.G.E. Consortlum/LLNL at: http://image.llnl.gov
Plate: LLAM1636 row: b column: 17
High quality sequence stop: 730.
Location/Qualifiers
                                                                                              986 TTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTA 1026
                                                                                                                    423 TTTGCGAAAAAGACAGGAGACAGYACTGTCATCTGCATTA 383
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: Gapbs-rémail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.lln.gov
Plate: LLAM9128 row: m column: 13
High quality sequence stop: 580.
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                             TCTAAAGGCTCCCAGGGCCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAG 360
                                                                                      GGCCCCAGTGGGGACCCAGGCCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGGCCCT 420
                                                                                                                                                                                                                                                                                                                                                                                          656 ACTAITITICAGITG---AGAAAGAATITITIGAGGATGCAAAGCTTTTCTGTGAAGACA 712
363 GCGGGTGAGAGGGGCACAATTGGACCAGTCGGCCCTCCTGGAGAGCGTGGCAGCAAAGGA 422
                                                                                                                                                                                                                          541 GCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCTGGCCCTGCAGAATGAGCCCAACCCCG
                                                                                                                                                                                                                                                                                                                               GCACCGGAGGACAATGGC--TGCCCGCCTCACTGGAAGAACTTCACA---GACAAATGCT
                                                                                                                                                 421 CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
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KEYWORDS
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AUTHORS
TITLE
JOURNAL
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AW958053 552 bp mRNA linear EST 01-JUN-2000 EST370123 MAGE resequences, MAGE Homo sapiens CDNA, mRNA sequence. AW958053
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/dev_stage="10 months, virgin"
/lab_nost="nH108"
/lab_nost="nH108"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sal1; Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Gilbert Smith, NIH"
153 c 161 g 107 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649
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and
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu
Bukaryota; Butheria; Primates; Catarrhini; Hominidae; H
1 (bases 1 to 552)
Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R.,
1.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. a
Quackenbush, J.
                                                                                                                                                                                                       Score 445.6; DB 12; Length
Pred. No. 2.6e-95;
); Mismatches 84; Indels
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                                                                                                                                                                                                         43.4%;
85.5%;
                                                                                                                                                                                                                              Best Local Similarity 85.5
Matches 496; Conservative
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EST 21-AUG-2002
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/clone_lib="NCI_CGAP_Man5"
/tissue_type="tunor, gross tissue"
/dev.stage="Tunoths"
/lab_host="DH10B"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sal1; Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys,
                      DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196 AAGGGACAGAAAGGAGAAGGGGGAGCCTGGACCACCTGGCCCTGCGGGTGAGAGGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        615 TGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTATTTTCAGTTGAGAA
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     CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
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Pred. No. 3.2e-88;
0; Mismatches 87;
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                                                                                  Plate: LLAM8516 row: k column: 12
High quality sequence stop: 551.
Location/Qualifiers
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                                                                                                                                                /organism="Mus musculus"/strain="C57BL/6J"
/db_xref="taxon:10090"
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Best Local Similarity 84.8%;
Matches 501; Conservative (
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601089246F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:3484163 5',
BE290299
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National Institutes of Health, Mammalian Gene Collection (MGC)
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Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
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                    20850, USA
                                                                                                                                                                  /db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAGE"
/note="Vector: pBluescriptSKm"
112 c 143 g 121 t
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The Institute for Genomic Research 9712 Medical Center Dr., Rockville, MD Tel: 301 838 3528
Fax: 301 838 0208
Email: johnq@tigr.org
Plate: 115
Seq primer: Reverse.
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/organism="Homo sapiens"
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Location/Qualifiers
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Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.
E (Dases 1 to 957)
S (NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
L (Dnpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CONT Library Preparation: ResGen, Invitrogen Corp.
CONA Library Preparation: ResGen, Invitrogen Corp.
CONA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:
http://mage.llnl.gov
Plate: LLAM13740 row: 1 column: 13
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/db_xref="taxon:10090"
/db_xref="taxon:10090"
/clone="lb="NH14MGC_129"
/lab_host="DH10B (phage-resistant)"
/note="organ: olfactory epithelium; Vector:
/note="organ: olfactory epithelium; Vector: Note: this
AGENCOURT_8763247 NIH_MGC_129 Mus musculus cDNA clone IMAGE:6313500
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86.2%; Pred. No. 3.3e-85;
Networkers 72;
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Location/Qualifiers
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269 c 258 g
                                                      BQ955927.1 GI:22371405
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Matches 481; Conservative
                    mRNA sequence.
                                                                                             house mouse.
Mus musculus
                        5', MRNA
BQ955927
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 638)

2 Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A.

3 Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Rawai, J., Konno, H., Kouda

4 M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Sakai, Y., Okido, T., Saito, R., Sakai, K., Sakai, K., Sahai, K., Sahai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, Y., Jakahashi, F., Takeda, Y., Tanaka, T., Toya, T., Muramatsu, M. and Hayashizaki, Y., et al. 2001)

3 Inpublished (2001)

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7 The Institute of Physical and Chemical Research (RIKEN)

7 The 181-45-503-9216

7 The Saki M. Taurumi-ku, Yokohama, Kanagawa 230-0045, Japan

7 Tel: 81-45-503-9216
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URL: http://genome.gsc.riken.go.jp,
URL: http://genome.gsc.riken.go.jp/
Carninci,P. Shibata,Y., Hayatsu.N., Sugahara,Y., Shibata,K., Itoh
'M., Konno,H., Okazak,Y., Hayatsu.N., and Hayashizak,Y.

Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. . 10 (10), 1617-1630 (2000)

wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
'S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
Hayashizaki,Y.
RIKEN integrated sequence analysis (RISA) system--384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res. .
10 (11), 1757-1771 (2000)

Konno,H., Fukunishi,Y. Shibata,K., Itoh,M., Carninci,P., Sugahara
'Y. and Hayashizaki,Y.
Computer-based methods for the mouse full-length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB248064 RIKEN full-length enriched, 7 days neonate cerebellum Musmusculus cDNA clone A730023E20 3', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           haydanizakı,ı.
Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp/) for
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773 CANGGCCCTCCTGGCTT-CAGGGACTACAGGGCACTGTGGGTGAGCCTGGAGTACCTGGA
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UI-E-EJO-ahq-c-05-0-UI.s2 UI-E-EJO Homo sapiens cDNA clone
UI-E-EJO-ahq-c-05-0-UI 3', mRNA sequence.
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                                                                                                                                         Genome Res. 6 (9), 791-806 (1996)
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1. .500
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                                                                 Homo sapiens
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                                                                                                           AUTHORS
TITLE
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KEYWORDS
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                                                                                                          prepared and sequenced in Mouse Genome Encyclopedia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCTGGATGGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /tissue_type="cerebellum"
/dev_stage="7 days neonate"
/lab.host="Nath10B"
/note="Site_1: Sal1; Site_2: BamHI; cDNA library
                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                        Length 638;
                                                                                                                                                                                                                                                                                                                                             76; Indels
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Pred. No. 3.4e-77
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            musculus
                     /db_xref="taxon:10090"
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                                 /clone="A730023E20
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84.5%;
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134 c
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EST 27-FEB-2002

linear

mRNA

500 bp

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Contect: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
University of Iowa
451 Eckstein Medical Research Building Iowa City, IA 52242, USA
7e1: 319 319 358 8250
Fax: 319 319 9565
Email: msoares@blue.weeg.uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com).
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/lab_host="DH108 (Life Technologies) (Tl phage resistant)"

/lab_host="DH108 (Life Technologies) (Tl phage resistant)"

/note="Organ: eye; Vector: pT713-pac (Pharmacia) with a
modified polylinker; Site_1: EcoR I; Site_2: Not I;

UI-E.BJO is a subtracted cDNA library constructed
according to Bonaldo, Lennon and Soares, Genome Research,
6:791-806, 1996. First strand cDNA synthesis was primed
with an oligo-dT primer containing a Not I site. Double
stranded cDNA was ligated to an EcoR I adaptor, digested
with Not I; and cloned directionally into pT773-Pac
vector: The oligonucleotide used to prime the synthesis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                first strand cDN contains a library tag sequence that is located between the Not I site and the (dTy18 tail. The sequence tags for this library are: fetal eyes. AGANTCAAGA; lens, CGANTAAGCGA; per anterior segment, AATGCGCAN; optic nerve, CGANTAAGTG; retina, CCGCG; Retina Foveal and Macular, GTCC; RPE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml; Mammalia; Eutheria; Primates; Catarrhin!; Hominidae; Homo. I (bases 1 to 500)
Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
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TAG_TISSUE=human eye anterior segment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:9606"
/clone="UI-E-EJO-ahq-c-05-0-UI"
/clone_lib="UI-E-EJO"
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first-strand crystals a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGATCAAGA; lens, CGATTAGCGA, eye anterior segment, AATGCGCAT; optic nerve, CCATTAAGTG; retina, CCGCG; Retina Foveal and Macular, GTCC; RPE and Chorold, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
       vector. The oligonucleotide used to prime the synthesis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
This clone was contributed by the Brain Molecular Anatomy Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 808)
NIH-WGC http://mgc.nci.nlh.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 ACACTAGAGAGGAACAGCAATGGATAAAAAAACAGATGGTAGGGAGGAGAGAGCCACTGGA 120,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BQ771366 B08 bp mRNA linear EST 26-JUL-
UI-M-FIO-byu-g-09-0-UI.rl NIH_BMAP_FIO Mus musculus cDNA clone
LMAGE:5702432 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                        677 AAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCATAA 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAG 856
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                                                                                                                                                                                                                                                                                             Length 507;
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                                                                                                                                                                                                                                                                                           34.1%; Score 350; DB 14;
100.0%; Pred. No. 1.3e-72;
ive 0; Mismatches 0;
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/lab_host="DH10B (Life Technologies) (Tl phage resistant)"
/lab_host="DH10B (Life Technologies) (Tl phage resistant)"
/note="Organ: eye; Vector: pT7T3-Pac (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not I;
UI-E-E10 is a subtracted cDNA library constructed
according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: msoares@blue.weeg.uiowa.edu
Tyssue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Mesarchers may obtain clones from Research
Genetics (www.resgen.com).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
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/db_xref="taxon:9606"
/clone="UI:E-EJO-ahq-c-05-0-UI"
/clone_lib="UI:E-EJO"
/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         451 Eckstein Medical Research Building Iowa City, IA 52242, USA Tel: 319 335 9260
Fax: 319 335 9565
853
                                                                                                 854 CAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCCATGGGCCAG 913
                                                                                                                                                                                                                     255
                                                                                                                                                                                                                                                                  GAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACG 973
                                                                                                                                                                                                                                                                                        GGATCGGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The following repetitive elements were found in this cDNA sequence: 443-498, >POLY_A#Simple_repeat
                                                                                                                                                                                                                                                                                                                                                         TCAATAACTTCATTGGGAAAAAGACAGGGACACTATTGTGTCATCTGCATTA 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             507 bp mRNA U.E.EJO-ahq-c-05-0-UI.rl UI-E-EJO Homo s UI-E-EJO-ahq-c-05-0-UI 5', mRNA sequence. BW13891.1 GI:19027149 EST.
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Location/Qualifiers
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EST 26-JUL-2002

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873 AGCTGGACAGCCGGAT -- AACTGGGGTCATGGCCATGGG 909
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   /clone_inb="Indaga" /
/clone_inb="Indaga" |
/clone_inb="Indaga" |
/clone_inb="Unit BMAP FIO" |
/dev_stage="whole brain" |
/dev_stage="mehryo 12.5dpc" |
/lab_host="DH10B (T1 phage resistant)" |
/lab_host="DH10B (T1 phage resistant)" |
/lab_host="DH10B (T1 phage resistant)" |
/lab_host="Lennon and Soares, Genome Research, 6:791-806, Site_2: Not I: The library was constructed according Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. Denatured RNA was size fractionated on a 1% agarose gel.First strand cDNA was size fractionate according a Not I site. Double strand cDNA was size selected according to mRNA size fraction, ligated with EcoR I adaptor, digested with NotI and then cloned directionally into pxx-asc vector. The library tag sequence located between the Not I site and the polyA tail is CAGCCACGAC. This library was created for the University low Baraln Anatomy Project (BMAP): 'Gene Discovery in the Developing Mouse Pervous System', supported by National Institute of Mental Health (NIMH), Hemin Chin, Ph.D.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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For clone availability, additional sequence and expression
for clone availability, additional sequence and expression
finformation related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
Location/Qualifiers
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/db_xref="ATCC (inhost):115883"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/clone_lib="Apcrte endothelial cells, TNF alpha-treated"
/call_type="endothelial cell"
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EcoRI; Site_2: XhoI" 69 c 86 g 71 t 6 others
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850 USA
Tel: 3018699056
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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=CM4&t2=CM4-HT0243-081199-037-f03&t3=1999-11-08&t4=1)
                                                                                           AW379436 357 bp mRNA linear EST 04-FEB-200
CM4-HT0243-081199-037-f03 HT0243 HOMO sapiens CDNA, mRNA sequence.
                                                                                                                                                                                       Homo sapiens ;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 357)
                                                                                                                                                                                                                                                                                                   Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               680 TITI-TGAGGAIGCAAAGCITITCIGIGAAGACAAGICITCACAICITGTITICAIAAAC 738
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The FAPESP/LICR Human Cancer Genome Project
Unpublished (1999)
Query Match 29.4%; Score 301.4; DB Best Local Similarity 99.1%; Pred. No. 4e-61; Matches 324; Conservative 0; Mismatches
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High quality sequence start: 18
High quality sequence stop: 357.
Location/Qualifiers
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316 AGACTGTGCTGGGTTGATTTATGCTGG 342
918 AGACTGTGCTGGGTTGATTTATGCTGG
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Search completed: March 21, 2003, 08:08:21 Job time: 1357.02 secs

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AAT16766 ABK64501

AAH78667

AB199885

ABK84041

DNA encoding novel Prostate cancer-as Nucleotide sequenc DNA encoding novel Human COL5A3 cDNA Novel human coding

AAS79806 ABK92176

DNA encoding human Human type IV coll Murine adipocytes-Porcine alpha2(I)

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AAD06577

AAH78668 ABN59647

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                           GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2185239 seqs, 1125999159 residues
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Maximum Match 100%
Listing first 45 summaries
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RESU	RESULT 1	
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AC	AAA07697;	
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Ы	20-JUN-2000 (f	(first entry)
XX		
XX	Human collectin encoding DNA.	encoding DNA.
ΚW	Collectin; huma	Collectin; human; antibacterial; antiviral; ds.
XX		
SO	Homo sapiens.	
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FH	Key	Location/Qualifiers
FT	CDS	551698
FT		/*tag= a
FT		/product= "collectin"
FT	misc_feature	1738
FI		/*tag= b
FT		/note= "fragment specifically claimed in claim 8"
FT	misc_feature	55738
FT		
FT		/note= "fragment specifically claimed in claim 8"
FT	misc_feature	79738
FT		
FT		/note= "fragment specifically claimed in claim 8"
FI	misc_feature	325738
FT		/*tag= e
FT		/note= "fragment specifically claimed in claim 8"
FT	misc_feature	358.,738
FT		/*tag= f

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ABL88085 AA160628 AA158842 AAC66903 ABQ92072

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AAA07697 ABA97932 AAH43036 ABL95574

Description

DB Length

Query

Score

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                                                                                                                    The invention relates to a human scavenger receptor-like protein. The protein is useful as a target molecule for diagnosis, prevention and treatment of autoimmune diseases such as rheumatoid arthritis.
                                                                                                                                                                                                                                      ATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATA 120
                                                                                                                                                                                       Gaps
                                                                                                                                                                                                     1 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCCAACTTATCAGTGATT 60
                                                                                                                                                                                                                                                                              | GCACCGGAGGACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTAT
                                                                                                                                                                                                                                                                                                                                                                    TCTAAAGGCTCCCAGGGCCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAG
                                                                                                                                                                                                                                                                                                                                    GCGGGTGAGAGGCCCAATTGGACCAGCTGGTCCCCCGGGAGAGCGTGGCGGCAAAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTCAGTTGAGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCA
                                                                                                                                                                    100.0%; Score 1026; DB 24; Length 2262; 100.0%; Pred. No. 2.5e-251;
                                                                                                                                                                                      ;
0
                                                                               new scavenger receptor-like protein for diagnosis, prevention treatment of autoimmune disease, such as rheumatoid arthritis
                                                                                                                                                                                      0; Indels
                                                                                                                                                      Sequence 2262 BP; 670 A; 576 C; 581 G; 435 T; 0 other;
                                                                                                                                                                                     0; Mismatches
                                                                                                      Claim 3; Fig 1; 38pp; Japanese
                      27-MAR-2000; 2000JP-0090772.
                                                                                                                                                                            Best Local Similarity 100.
Matches 1026; Conservative
                                       (SHIO ) SHIONOGI & CO
                                                     WPI; 2002-144965/19.
P-PSDB; ABB08642.
      08-DEC-2000;
                                                                                                                                                                     Query Match
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angloplasty;
low density lipoprotein; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence encodes a human scavenger receptor, designated SRCL-Pl. The SRCL-Pl polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic
                                                                                                                    2073
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                                                                                                                                                                                                                                                                                                                                                            GATGGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of a human scavenger receptor.
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/product= "scavenger receptor"
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complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density
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                                                                                 1 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATT
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                                                                                                                                                                                                                                                                       GGCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCAACCCCG
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                                                                                                                                           CTACAAGGTCCACGGGCCCCCAGGGGTCCAAGAGGTGACAGGGATCCCAGGGACCCCCT
                                                                                                                                                                                                                                                                                            CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
                                                                                                                                                                                                                                                                                                                           100.0%; Score 1026; DB 22; Length 2628;
llarity 100.0%; Pred. No. 2.6e-251;
Conservative 0; Mismatches 0; Indels 0;
       which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products
                                    Sequence 2628 BP; 783 A; 661 C; 656 G; 528 T; 0 other;
                                                          Best Local Similarity
Matches 1026; Conserv
                                                    Query Match
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                                                                                                          2234 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAAGACAGGGAGACACTCATCT
                                                                    CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; anglogenesis; PRO protein; cardiovascularisation; wound; atherosclerosis; cardiac hypertrophy; gene therapy; endothelial cardiant; cytostatic; antianglogenic; hypotensive; vulnerary; antiarteriosclerotic; gene; ss.
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2000US-0664610
2000US-242922
2000WO-US30952
2000WO-US30952
2000WO-US30873
2000WO-US30873
2000WO-US30873
2000WO-US3678
2000US-0747259
2001US-077659
2001US-077659
2001US-0776520
2001US-0776520
2001US-0776520
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2000US-22061D.
2000US-22695P.
2000US-0543657.
2000WS-0543657.
2000WS-053328.
2000WS-053328.
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2001US-0854280.
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10-NOV-2000;
20-DEC-2000;
20-DEC-2000;
22-JAN-2001;
28-FEB-2001;
28-FEB-2001;
01-MAR-2001;
01-MAR-2001;
14-MAR-2001;
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05-APR-2001;
10-MAY-2001;
10-MAY-2001;
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ABL95574
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Human; anglogenesis; cardiant; cytostatic; antianglogenic; hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO anteagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cardiac disorder; endothelial disorder; cardiac hypertrophy; atherosclerosis; hypertension; anglogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; arterial restenosis; andina; rhenmatoid arthritis; myocardial infarction; thrombophlebitis; lymphangitis; tumour anglogenesis; breast carcinoma; liver carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT 1020
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                                                     wound healing; chromosome mapping; gene mapping; gene; ss
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2000US-219556P.
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20-JUL-2000;
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ABL88085
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                                                                                                                                                                                                                                                                                                                                                                                                                                   atheroscierosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophiebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           537
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                                                                                                                                                                                                                           NF;
                                                                                                                                                                                                                                                                                                     One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Gaps
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                                                                                                                                                                                                                           Paoni
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Pred. No. 6.1e-251;
0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                         hypertrophy, trauma, cancer, age-related macular degeneration,
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KJ, Marsters SA, Pan J,
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                                                                                                                                                                                                                                       Williams PM, Wood WI,
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L, Hillan KJ,
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                                                                                                                                                                                                                         Gurney AL,
Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match 99.89
Best Local Similarity 99.99
Matches 1025; Conservative
                                                 GODDARD A.
GODOWSKI P J.
GURNEY A L.
HILLAN K J.
MARSTERS S A.
                        GERBER H.
GERRITSEN M E.
                                                                                                                            PAGNIN F.
STEPHAN J F.
WATANABE C K.
WILLIAMS P M.
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BAKER K P.
FERRARA N.
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                                                                                                                   PAN J.
PAONI
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(GODO/)
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ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic,
antiangiogenic, hypotensive, vulnerary and antiarteriosclerotic
activities, and can be used in gene therapy. The PRO polynucleotides,
proteins, agonists and antagonists are useful for treating or diagnosing
a cardiovascular, endothelial or angiogenic disorder in a mammal,
e.g. cardiac hypotrrophy, trauma, cancer, age-related macular
c.g. cardiac hypotrrophy, trauma, cancer, age-related macular
rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis,
lymphangitis, tumour angiogenesis (such as breast carcinoma and liver
carcinoma) and wound healing. The PRO polynucleotides have applications
in molecular biology, including use as hybridisation probes, and in
chromosome and gene mapping. ABL88259 to ABL88267 represent primers and
probes used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerber H, Gerritsen ME, Goddard A;
J, Hillan KJ, Marsters SA, Pan J, Paoni
KK, Williams PM, Wood WI, Ye W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 24; Length 2005;
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Pred. No. 6.1e-251;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Fig 27; 565pp; English.
                                                                                                                                                                                                                                   28-FEB-2001; 20010S-0796498.
28-FEB-2001; 20010W0-US06565.
09-MAR-2001; 20010W0-US06666.
14-MAR-2001; 2001US-0802706.
14-MAR-2001; 2001US-0816744.
22-MAR-2001; 2001US-0818744.
10-MAY-2001; 2001US-0854208.
10-MAY-2001; 2001US-0856028.
25-MAY-2001; 2001US-0866028.
25-MAY-2001; 2001US-0866028.
25-MAY-2001; 2001US-0866028.
25-MAY-2001; 2001US-0866028.
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                             2000WO-US20710
                                        2000US-222695P
                                                                  2000WO-US23522
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GETH ) GENENTECH INC.
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25-JUL-2000;
25-JUL-2000;
28-JUL-2000;
02-AUG-2000;
17-AUG-2000;
23-AUG-2000;
                                                                           24-AUG-2000;
07-SEP-2000;
18-SEP-2000;
18-SEP-2000;
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08 - NOV - 2000;
08 - NOV - 2000;
10 - NOV - 2000;
01 - DEC - 2000;
20 - DEC - 2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PJ,
                                                                                                                                                                                                                           22-JAN-2001;
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1438 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                         118 GCGGGTGAGAGAGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGAAAGGA
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Best\_Local Similarity 99.9 Matches 1025; Conservative

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537

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and C.N.S disorders.
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                                                                                  nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
                                                                                            peripheral nervous system; neuropathy; central nervous system; CNS; Alzhbaimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Brager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                       Wang
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Pred. No. 6.3e-251;
0; Mismatches 1; Indels 0;
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Zhang J;
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Yang Y,
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Xu C, Xue AJ,
Drmanac RT;
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                                                         Human polynucleotide SEQ ID NO 4617.
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Wang Z, Wehrman T, X
Zhou P, Goodrich R,
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2000US-0552317.
2000US-0598042.
2000US-0620312.
2000US-0653450.
2000US-0662191.
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Best Local Similarity 99.9%;
Matches 1025; Conservative (
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                                  (first entry)
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Zhou P,
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03-AUG-2000;
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Wang J, W
Zhao QA,
           AAI60628;
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GCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGA
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CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
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                                                            Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
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Zhang J;
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Yang Y,
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Pred. No. 6.4e-251;
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Ku C, Xue AJ,
Drmanac RT;
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                                    Human polynucleotide SEQ ID NO 1045
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Vang Z, Wehrman T, Xt
Zhou P, Goodrich R,
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2000US-0552317.
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            (first entry)
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Matches 1025; Conservative
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P-PSDB; AAM39686.
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14-SEP-2000;
19-OCT-2000;
29-NOV-2000;
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Zhao QA,
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GCATTA 1026
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides the protein and coding sequences for 25 novel extracellular matrix and adhesion-associated proteins (EXMADS). These are designated EXMAD-1, EXMAD-2, EXMAD-1, EXMAD-2, EXMAD-1, EXM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Isolated polynucleotide encoding extracellular matrix or adhesion-associated protein (EXMAD) useful for diagnosing, treating, or preventing disorders associated with expression of EXMAD such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1151
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                                                                                                                                                                                                                                                                                                                                                                        Lu DAM;
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                                                     Extracellular matrix and adhesion-associated protein; EXMAD; cancer;
                                                                   inflammation; reproductive disorder; cardiovascular disorder; immune disorder; musculoskeletal disorder; developmental disorder; gastrointestinal disorder; cell proliferation disorder; ss.
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Pred. No. 6.8e-251;
0; Mismatches 1; Indels 0; 0
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Matches 1025; Conservative
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                coding
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                  EXMAD-14
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1332 CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
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                                                                                                  CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA
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1326 ATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATA 1385

1386 CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGCAGAGGATCCCAGGGACCCCT

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GCGGGTGAGAGAGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGA

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GGCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGGAAAGAGGGACTCCCCGGCCCT

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1686 CAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGA

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CCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCC

GCACCGGAGGACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTAT 1866 GCACCGGAGGACAATAGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTAT

GCCCTCCTGGCCCATCAGGAGCGGTGCTGCCCCTGGCCCTGCAGAATGAGCCAACCCCG

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The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (CDNA) inserts (II), where the protein is substantially free from conternamealian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to angiogenesis, cytokine, cell proliferation, call differentiation, antinflammatory, stem cells prove factor activity and activin or inhibin-related activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzahmer's, Parkinson's disease, amytorophic certivity, regulation of haematopoiesis and is useful for treating myeloid or lateral sclerosis. (I) is involved in chemotactic or chemokinetic cor lymphoid cell disorders, platelet disorders such as thrombocytopaenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders or periodontal disease. (I) is also useful for gut protection or treating survances immune disorders in an autoimmune disorders e.g. multiple sclerosis, rheumatoid architis, and an architishly expressed and in gene therapy. The present combined is that of a polymologic that is preferentially processed and in gene therapy. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autolmmune diseases, bone disorders and lung or liver fibrosis
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Spaulding V;
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99.9%;
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Treacy M,
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LAVALLIE E R.
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MERBERG D.
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US2002065394-A1
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Merberg D,
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                                                                                                            GATGGGACATCTCCAGACTACAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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This DNA sequence was isolated from a human adult brain cDNA
library, and was designated clone bv227_1. The DNAs and proteins
are predicted to have biological activities which would make them
suitable for treating, preventing or ameliorating medical conditions in
humans and animals, although no supporting data is given. Suggested
activities include nutritional sources or supplements, immune
stimulating or suppressing activity, hematopoiesis regulating activity,
clissue growth activity, activiny/inhibin activity,
chemotactic/chemokinetic activity, hemmostatic and thrombolytic activity,
receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
receptor/ligand activity, and tumour inhibition activity. The DNAs
are also stated to be useful for gene therapy. A host cell transfected
with the DNA, or its subfragments and variants is useful for recombinant
                                                            Secreted protein; human; nutritional supplements; immune stimulant; immune suppressor; haematopoiesis regulator; tissue growth; chemotaxis; activin/inhibin; chemokinesis; haemostasis; thrombolysis; receptor/ligand activity; anti-inflammatory; tumour inhibitor; cadherin/tumour invasion suppressor; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polynucleotides encoding secreted human proteins - derived from human foetal brain, adult brain, foetal kidney, adult ovary, adult retina, adult placenta or adult uterus cDNA libraries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.8%; Score 1024.4; DB 20; Length 2930; 99.9%; Pred. No. 7e-251;
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                                     Human secreted protein clone bv227_1 coding sequence.
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production of the human secreted protein clones.
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Treacy M;
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P-PSDB; AAW73628.
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ATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATA
                                CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
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Best Local Similarity 99.9 Matches 1025; Conservative

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Query Match

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411 423 471 483 531 543 591 603 651 663 711 723 771 783 831 843 891 903 951 963

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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angloplasty;
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  412 TCCAGTGGGGACCCCGGGCCCCCGGGCCACCAGGGAAAGAGGGGACTCCCCGGCCCTCAG
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                                                               AAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGC
                                                                                                                                                364 CCCAGTGGGGACCCCAGGCCCCCCGGGCCCACAGGCAAAGAGGGACTCCCCGGCCCTCAG
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Note: The sequence data for this patent did not appear in the printed construction of the coding sequence of the invention of format directly from WIPO constructions of the invention of format directly from WIPO constructions.
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                                                                                                                          DNA encoding novel human diagnostic protein #6937.
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99.8%;
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
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                          TITICAGTIGAGAAAGTITITIGAGGAIGCAAAGCTITICIGIGAAGACAAGTCTICA 720
                                                                                                                                                                2192 GGCCATGGGCCAGGAGAAGACTGTGCTGGCTTGATTAACGCAGGACAGTGGAATGACTTC
                                                                                                                    GCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCCTGCAGAATGAGCCCAACCCCG
                                                           GCACCGGAGGACAATGGCTGCCCGCCTCACTGGAAGAACTTCACAGACAAATGCTACTAT
                                                                                                                                                    GATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
                                                                                                                                                                                                                                                                                            GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleotide sequence of a human scavenger receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "scavenger receptor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
74..1936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH43054 standard; DNA; 2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     low density lipoprotein; ss
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2000JP-0309068
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                                                                                                                                                                                    New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized
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                                                                                                                                                                                                                                                                                                                                                                                              Length 2637;
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86.4%; Pred. No. 3.1e-194;
Live 0; Mismatches 140; Indels
                                                                                                                                                                                                                                                                                                                                                                       Sequence 2637 BP; 829 A; 617 C; 635 G; 556 T; 0 other;
                                                                                                                                                                                                           low-density lipoprotein accumulation
                                                                                                                                                                                                                               Claim 6; Page 88-93; 118pp; Japanese.
                                                                  2000JP-0035155
2000JP-0309068
                                           08-FEB-2001; 2001WO-JP00874
                                                                                                      PHARM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity 86.4
Matches 886; Conservative
                                                                                                                                                  WPI; 2001-497076/54.
                                                                                                                                                             P-PSDB; AAG63347
WO200159107-A1
                                                                                                     (FUSO ) FUSO
                                                                              10-OCT-2000;
                                                                   14-FEB-2000;
                      16-AUG-2001
                                                                                                                            Wakamiya N;
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Tang YT;

Liu C,

Drmanac RT,

(HYSE-) HYSEQ INC

WPI; 2001-639362/73.

P-PSDB; ABG06944

30-MAR-2001; 2001WO-US08631

WO200175067-A2

11-0CT-2001

Homo sapiens.

2000US-0540217 2000US-0649167

31-MAR-2000; 23-AUG-2000;

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                                                                                                                  The present sequence encodes a human scavenger receptor, designated SRCL-1. The SRCL-1 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angloplasty, which are associated with accumulation of oxidized low density
                             New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized
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                                                                                                                                                                                                                                                                                                                                                           489 ACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCCCGGCCCTCC 548
                                                                                                                                                                                                                                                                                                                                                                                                                      549 TGGCCCATCAGGAGCGGTGGTGCCCTTGGCCTGCAGAATGAGCCAACCCCGGCACCGGA 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGGTCATGGCCATGG 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGA 968
                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGCGGGCTGCCCGCCTCACTGGAACTTCACAGACAAATGCTACTATTTTTCAGT
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                                                                                                                                                                                                                                                                                                  DB 22; Length 2256;
                                                                                                                                                                                                                                                                                                                              67; Indels
                                                                                                                                                                                                                                                                     Sequence 2256 BP; 721 A; 524 C; 528 G; 483 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA encoding novel human diagnostic protein #6935.
                                                                                                                                                                                                                                                                                                                  1.3e - 95
                                                                                                                                                                                                                                                                                                                Pred. No. 1.3e
0; Mismatches
                                                                                                                                                                                                                                                                                                  Score 414.8;
                                                                                        Claim 4; Page 105-109; 118pp; Japanese.
                                                          low-density lipoprotein accumulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAS71131 standard; cDNA; 493
                                                                                                                                                                                                                                                                                               Query Match 40.4%;
Best Local Similarity 87.0%;
Matches 468; Conservative
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P-PSDB; AAG63350
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymeratase chair reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags (or identifying expressed genes. (I) is useful in gene therapy techniques (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its bidding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical disorders involving aberrant protein expression or biological activity. The polypeptide and polynuclectide sequences have applications in creaponsible for genetic disorders or other trails to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. AAS64197-AAS94564 represent novel human or diagnostic coding sequences of the invention.

Construction of purpose of the invention.

Construction of the printed construction of the construction of the invention.

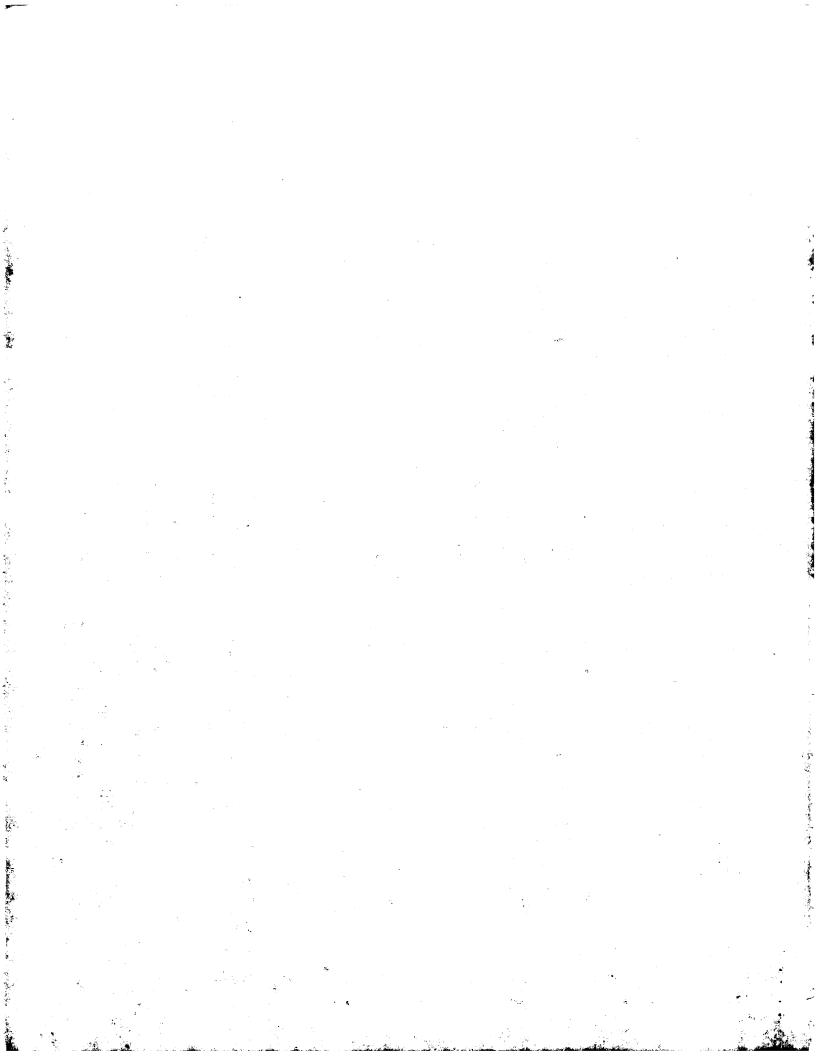
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New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            812 CAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATC-TCCAGACTACA-AAAATTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 493 BP; 121 A; 116 C; 99 G; 157 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
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                                                                                                                                                                                                                                                            Claim 1; SEQ ID No 6935; 103pp; English.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of the invention. The CSR proteins are macrophage scavenger receptor proteins. The CSR proteins can be used in the treatment, gene therapy and disgnosis of diseases in which intracellular stress is important, such as arteriosclerosis, diabetic circulatory obstruction, and microbial infection. Expression of the proteins is induced in vivo in response to intracellular stress, and inhibits cell death as a result of such stress.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence encodes the human cellular stress response 3 (CSR3) protein
                                                                                                                                                                                                                                  Cellular stress response protein; CSR1; CSR2; CSR3; human; macrophage; scavenger receptor protein; intracellular stress; arteriosclerosis; diabetic circulatory obstruction; microbial infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254 GCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCC 313
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    for treatment and diagnosis of

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15.4%; Score 157.6; DB 2 55.5%; Pred. No. 5.3e-30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 6; Page 142-150; 175pp; Japanese.
                                                                                                                                                                            Human CSR3 protein coding sequence
AAX27858 standard; DNA; 3685 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disorders involving cell stress
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                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                    02-JUN-1999
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GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a

Homo sapiens CL-P1 mRNA for collectin placenta 1, complete cds.
AB005145
AB005145.

RESULT 1
AB005145
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE

ORGANISM

REFERENCE AUTHORS

ALIGNMENTS

Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Homo sapiens female tissue\_lib:placenta cDNA to mRNA.

Ohtani, K., Suzuki, Y., Eda, S., Kawai, T., Kase, T., Keshi, H., Sakai, Y., Fukuoh, A., Sakamoto, T., Itabe, H., Suzutani, T., Ogasawara, M., Yoshida, I. and Wakamiya, N.

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                                                                   C bases 1 to 2983)
Ohtani, K.
Direct Submission

Binert Submission

Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Department of Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa,
Hokkaido 078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:+81-166-68-2399, Fax:+81-166-68-2399)
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       scavenger receptor
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                                        (2001)
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Pred. No. 1.4e-300;
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The membrane-type collectin CL-P1 is vascular endothelial cells J. Biol. Chem. 276 (47), 44222-44228 J1570232
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llarity 99.9%;
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1886 bp mRNA linear PRI 20-MAR-2002 DKFZp547G1215 (from clone DKFZp547G1215).

Homo sapiens mRNA; cDNA AL713657

HSM802985

LOCUS

ACCESSION KEYWORDS VERSION

GI:19584339

AL713657.1

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                                                                                                                                                                                                             This clone (DKFZp547G1215) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further information about the clone and the sequencing project is available at http://mips.gsf.de/proj/cDNA/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="hypothetical protein"
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DSKHGQLIKNFTILGGPPGPRGPRGDRGSQGPPGPTGNKGQKGEKGEPGPPGPAGERG
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PROGLOGYTVGEPGYPEPRGLEGLPGYPWGPRGPRGPPGPSPGSGAVVPLALQNBFTPA
PEDNGCPPHWKNFTPKZY YESPEREIFEDAKLFCEDKSSHIVFINTREEQQWYKKQMY
GRESHWIGLTDSFRENEWKWLDGTSPDYKNWKAGQPDNWGHGHGPGEDCAGLIYAGQW
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                                                                                                                  Martinsried, GERMANY
Clone from S. Wiemann, Molecular Genome Analysis, German Canc
Research Center (DKFZ); Email S. wiemann@dkfz-heidelberg.de;
sequenced by BMFZ (Biomedical Research Center at the Charite,
Berlin/Germany) within the cDNA sequencing consortium of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATA
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                                                         1 (bases 1 to 1886)
Nochrer, K., Beyer, A., Mewes, H.W., Weil, B. and Wiemann, S. Direct Submission
Submitted (12-MAR-2002) MIPS, Am Klopferspitz 18a, D-82152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
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            Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
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Pred. No. 3.2e-300;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                /clone="bkrzp547G1215"
/tissue_type="brain"
/clone_lib="547 (synonym: hf
bH10B; sites Not1 + SalI"
/dev_stage="fetal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NDFQCEDVNNFICEKDRETVLSSAL"
                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
/map="18p11.3"
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Best Local Similarity 99.9%;
Matches 1349; Conservative
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                                                                      AUTHORS
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Patent: WO 0208284-A 27 31-JAN-2002;
Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone (US); Gerber, US); Gerritsen, Mary E. (US); Goddard, Audrey (US); Goddwski, Paul J. (US); Gurney, Austin L. (US); Hillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US); Panillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US); Panillians, Nicholas F. (US); Stephan, Jean-Philippe F. (US); Ilian I. (US); Williams, P. Mickey (US); Wood, William I. (US)
                                                                                                                                                                                     Baker, K.P., Ferrara, N., Gerber, H., Gerritsen, M.E., Goddard, A., Godowski, P.J., Gurney, A.L., Hillan, K.J., Marsters, S.A., Pan, J., Paoni, N.F., Stephan, J.P., Watanabe, C.K., Williams, P.M., Wood, W.I. and Ye, W.
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REFERENCE 1 AUTHORS Baker,K.P., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A., Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J., Pandi,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I. TITLE Compositions and methods for the diagnosis and treatment of disorders involving angiogenesis JOURNAL Patent: WO 0200690-A 27 03-JAN-2002; Genentech, Inc. (US) Coation/Qualifiers 1. 2005 /Organism="Homo sapiens" /db_xref="taxon:9606" /db_xref="taxon:9606" /db_xref="taxon:9606"	Query Match  Best Local Similarity 99.9%; Score 1337.4; DB 6; Length 2005;  Best Local Similarity 99.9%; Pred. No. 3.3e-300;  Matches 1349; Conservative 0; Mismatches 1; Indels 1; Gaps 1;  Qy 1 ATGCAACAAGAGTTTGATGAGGTCGAGGTTAGACACTGAACTAGCCAACTTATCAGGATT 60  Db 478 ATGCAACAAGATTGATGAGGTTAGAGGTTAGAACTAGCCAACTTATCAGTGATT 537	ATGGAAGAATTTACAATTTACAATTTACAATTTTACAATA	QY         181 GGCCCAACTGGCAACAAGGACAGAAAGGAGAGGGGAGCCTGGACCACCTGGCCCT         240           b         658 GGCCCAACTGGCAACAGAAAGGACAGAAGGGGAGCCTGGACCACGTGGCCT         717           QY         241 GCGGTGAGAGAGGACAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGA         300           DD         718 GCGGTGAGAGGCCCAATTGGACCAGTGGTCCCCCCGGAGAGCGTGGCGGCAAAGGA         300           DD         718 GCGGTGAGAGGCCCAATTGGACCAGTGGTCCCCCCGGAGAGCGTGGCGCGAAAGGA         377	QY         301 TCTAAAGGCTCCCAAGGGCCCCAAAGGCTCCCGGGAAGCCCGGCCCTCAG         360           1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	QY         421         CAGGGCCCTCCTGGCATTCCAGGGCACCTTGGGGAGCCTGGGTGCCTGGA 480           IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	QY         541 GGCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCTGCCCGCAGAATGAGCCAACCCCG         600           IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Oy         661 TTTTCAGTTGAGAAATTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTTTCA 720           Db         1138 TTTCAGTTGAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTTTCA 1197           Qy         721 CATCTTGTTTCATAAACACTAGAGGAACAGCAATGGATAAAAAACAGATGGTAGGG 780           Db         1198 CATCTTGTTTCATAAACACTAGAGGAACAGCAATGGATAAAAAAACAGATGGTAGGG 780           Db         1198 CATCTTGTTTCATAAACACTAGAGGAACAGCAATGGATAAAAAAAA

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Nakamura, K., Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T.
Molecular cloning and functional characterization of a human
scavenger receptor with C-type lectin (SRCL), a novel member of a
                                                                                                                                                                                                                                                                                                   ABU38518 3058 bp mRNA linear PRI 08-MAR-20
Homo sapiens SRCL mRNA for scavenger receptor with C-type lectin
type I, complete cds.
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Nakamura, K. and Nakamura, T.
Nakamura, K. and Nakamura, T.
Direct Submission
Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medics
School, Division of Biochemistry, Biomedical Research Center;
yamadaoka, Suita, Osaka 565-0871, Japan
(E-mail:knakamura@onbich.med.osaka-u.ac.jp,
Tel:81-6-6879-378310-7883), Fax:81-6-6879-3789)
2051 CCAATTACTGAAAAAAAATGACAGCTAGTGTTTTTTACCATCCGTCATTACCCAAAGAC
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
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/db_xref="taxon:9606"
/tissue_lib="Placenta"
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/gene="SRCL"
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ILCALLTITVALLGYKYVEKMONVTDGMETSHQTYDNKLTAVESDLKKLGDQAGKALL
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SFLITTVNKTLQAYGOLGFITEKTSKNKDTLGSGYVTMILNNILNLTQVOQR
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REQVETDIVNIISNISYRAHLRTTSALNDVRTCTDTLFRHTDDLFSLNNTLVNI
RLDSISGLRMQQDMMRSKLDTBVANLSVVMEENKLVDSKHGQLIKNFTLLQFPGFRGR
KGDRGSQGPFGFRGSKGSKGSKGSGFR
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Direct Submission
Submitted (18-JAN-2002) Katsuki Ohtani, Asahikawa Medical College, Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido 078-8510, Japan (E-mail-ohtani@asahikawa-med.ac.jp, Tel:81-166-68-2393, Fax:81-166-68-2399)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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CDNA cloning of mouse CL-Pl gene
Unpublished
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/organism="Mus musculus"
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                                                                                                                     Indels
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Pred. No. 2.1e-197;
0; Mismatches 228; I
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/translation-"MKDDFAEEEEVQSFGYKRFGIHEGTQCTKCINNWALKFSIVLLY
ILCALLTITVAILGYKVVEKMDNVSDGMETSHQTYDNKLTAVESDLKKLGDQAGKKAL
STNSELSTFRSDILDIRQQLQEITEKTSKNKDTLEKLQANGDSLVDRQSQLKETLQNN
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Molecular cloning of a mouse scavenger receptor with C-type lectin
(SRCI)(1), a novel member of the scavenger receptor family
Biochim. Biophys. Acta 1522 (1), 53-58 (2001)
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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Mus musculus srcl mRNA for scavenger receptor with C-type lectin,
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/db_xref="taxon:10090"
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/db_xref="GI:18146952"
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Nakamura, K. and Nakamura, T.
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Mus musculus
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KANDTLEDDMNSQLSSFTGQMDNITTISQANGDSLKDLQDLEKDTBRETAVKFSQLEE
RFQVFETDIVNISYTSAHLRTTTSNLDVWTTCTDTLTRHTDDLTSLNNTLVNI
RLDSISLRMQQDMMRRKLDTEVANLSVVMEEMKLVDSKHGQLIKNFTLQGPPGPRGP
KGDRGSQGPPGPTGNKGQKGEKGEPGPPGFAGERGTIGPVGPPGERGSKGSQGPK
GSRGSPGKRGPGPGPGPGPGPGCPGFGCPGFGGPGGGTGTGPVGPPGERGSKGSQGPK
LPGVPGMPGPKGPPGPGPGAMFLNLSVYMEEMKLUSTRJCTGPVGPPGERGSKGSGGPK
GSRGSPGKRGPGPGPGAMFGLDQNPPTPASEVNGCPPHWKNFTDKCYYFSLE
KEILEDAKLFCEDKSSHLVFINSREEQQMIKKHTVGRESHWIGTTDSEQESEWWLDG
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Pred. No. 1.4e-195;
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Maramura, F. Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T. Makamura, K., Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T. Molecular cloning and functional characterization of a human scavenger receptor with C-type lectin (SRCL), a novel member of a blochem. Blophys. Res. Commun. 280 (4), 1028-1035 (2001)

E. Joases I to 4330)

Maramura, K. and Nakamura, T.

Direct Submission

Sobol of Medicine, Division of Biochemistry, Biomedical Research Center; 2-2 yamadaoka, suita, Osaka 565-0871, Japan

(E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783, Fax:81-6-6879-3783)
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Hattori, M., Ishii, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fujiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Hong sapiens genomic DNA
L Published Only in Database (1999)
E 2 (bases 1 to 188439)
S Hattori, M., Ishli, K., Toyoda, A., Taylor, T.D., Hong-Seog, P., Fujiyama, A., Yada, T., Totoki, Y., Watanabe, H. and Sakaki, Y. Direct Submission
L Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC): 1-7-22 Suchliro-Chou, Tsurumi-Ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:hattoriggsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)
On Apr 26, 2002 this sequence version replaced gi:9188470.
                                                                                                                                                                                                                                                                APPUU0915 188439 bp DNA linear PRI 27-APR-2002 Homo sapiens genomic DNA, chromosome 18p clone:RP11-720L2, complete sequences.
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Eukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                Db 153397 TCCTGGCCCATCAGGAGCGGTGCTGCCCTGGCCCTGCAGAATGAGCCCAACCCCAGCACC 153338
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                                            546 TCCTGGCCCATCAGGAGCGGTGGTGCCCTGGCCCTGCAGAATGAGCCAACCCCGGCACC
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99.6%; Pred. No. 9.3e-103;
iive 0; Mismatches 2;
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41134 c 40027 g 53275
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens DNA, clone: RP11-720L2.
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/chromosome="18"
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Matches 490; Conservative
                                                                                                                                                                         Db 153337 GGAGGACAATGG 153326
                                                                                                                                 GGAGGACAATGG 617
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REFERENCE
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KEYWORDS
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FEATURES
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                                                                              49221 49320: gap of 100 bp 49221 66394: contig of 17074 bp in length 66395 66494: gap of 100 bp 66395 66494: gap of 100 bp 66495 91692: contig of 25198 bp in length 91693 91792: gap of 100 bp 120870 120869: contig of 29077 bp in length 120870 120969: gap of 100 bp 120870 120969: gap of 100 bp 120870 120969: gap of 48119 bp in length.
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22425 22524: gap of 100 bp
22525 38094: contig of 15570 bp in length
38095 38194: gap of 100 bp
38195 49220: contig of 11026 bp in length
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1. .17943
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33537 c 34088 g 52660 t
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22555. __.38094
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91793. .120869

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                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
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/chromosome="18"
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arbitrary. Low-pass sequence sampling is useful for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACU24368 71044 bp DNA linear HTG 28-FEB-2000 SEQUENCE SAMPLING.
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Catarrhini; Hominidae; Homo.
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545
                                                                                                                                                                                      546 TCCTGGCCCATCAGGAGCGGTGGTGCCCTGGCTGCAGAATGAGCCAACCCGGCACC 605
                                                                                GGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCCGGCCC
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Submitted (28-FEB-2000) Whitehead Institute/MIT Center
Research, 320 Charles Street, Cambridge, MA 02141, USA
All repeats were identified using RepeatWasker:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOTE: This record contains 90 individual sequencing reads that have not been assembled into contigs. Runs of N are used to separate the reads and the order in which they appear is completely
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo sapiens chromosome 11, clone RP11-179K3
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Center project name: L6145
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Mammalia, Eutheria, Primates;
1 (bases 1 to 71044)
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AC024368.1 GI:7108157
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                                                                                                                                                                                                                                                                                                                                              44458 GGAGGACAATGG 44447
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TITLE
JOURNAL
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AUTHORS
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identifying clones that may be gene-rich and allows overlap relationships among clones to be deduced. However, it should not be assumed that this clone will be sequenced to completion. In the event that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10141 10240; gap of 100 bp 101240; contig of 682 bp in length 1023 1022: gap of 100 bp 1023 11029: gap of 100 bp 11029; line gap of 100 bp 11020; line gap of 100 bp 1100 lp 112612 11304: contig of 687 bp in length 12512 13304: contig of 693 bp in length 12512 13304: contig of 693 bp in length 13305 13404: gap of 100 bp 13405 14095; gap of 100 bp 14196; gap of 100 bp 14198: gap of 100 bp 15574: gap of 100 bp 15574: gap of 100 bp 15575 15774: gap of 100 bp 16561 15500: gap of 100 bp 16561 15500: gap of 100 bp 17251 17250: contig of 690 bp in length 16561 16560: gap of 100 bp 17251 17350: gap of 100 bp 17250
                                                                                                    the record is updated, the accession number will be preserved.
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4025. Contig of 689 bp in length
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4125. gap of
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41818. Contig of 689 bp in length
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44270. 4566. gap of
44967. Contig of 684 bp in length
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47337. 4736: Gontig of 691 bp in length
4824. 48899: Contig of 670 bp in length
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187635 bp DNA linear HTG 30-MAY-2000
Homo sapiens chromosome 18 clone RP11-815L4 map 18P11.3, WORKING
DRAFT SEQUENCE, 33 unordered pieces.
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Hattori,M., Ishi,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Homo sapiens 187,635 genomic DNA of 18pll.3
Published Only in DataBase (2000)
2 (bases 1 to 187635)
2 (bases 1 to 187635)
Publisha, Ishli,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
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                                                                        119 TACTACAAGGTCCACCGGCCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCC 178
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 Length 71044;
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Center code: RIKEN
Web site: http://hgp.gsc.riken.go.jp/
 Score 484.6; DB 2;
Pred. No. 8e-102;
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HTG; HTGS_PHASE1; HTGS_DRAFT.
Homo sapiens DNA, clone:RP11-815L4.
Homo sapiens
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                                                                                                       Sequencing vector: PCR products; 100% of reads Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0.990329 Consensus quality: 177020 bases at least Q40 Consensus quality: 177020 bases at least Q30 Consensus quality: 182105 bases at least Q20
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Quality coverage: 4.35x in Q20 bases; sum-of-contigs
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* NOTE: This is a 'working draft' sequence. It currentl
* consists of 33 contigs. The true order of the pieces
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Contact: hattori@gsc.riken.go.jp
                          ------ Project Information
Center project name: HumDraft18
                                                                 Center clone name: RP11-815L4
                                                                                       Summary Statistics
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Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); Kitasato Gultv., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555, Japan (E-mail:hattoriegsc.riken.go.jp, Tel:81-42-778-9923, Fax:81-42-778-9924)
on May 31, 2000 this sequence version replaced gi:6997403.
Center: RIKEN Genomic Sciences Center(GSC)
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                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                          1 (bases 1 to 17802)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fuliyama,A., Yada,T., Totodi,Y., Watanabe,H. and Sakaki,Y. Published Only in DataBase (1999)
2 (bases 1 to 17802)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fuliyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. Published Only in DataBase (1999)
2 (bases 1 to 178022)
Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Direct Submission
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Sequence updated (26-May-2000).
* NOTE: This is a 'working draft' sequence. It currently consists of 20 contigs. The true order of the pleces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as * runs of N, but the exact sizes of the gaps are unknown.
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                                    sapiens DNA, clone: RP11-683J11
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169986 contig o
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172317 contig o
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                     HTG; HTGS_PHASE1; HTGS_DRAFT
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                                                                                         //note="assembly_fragment"
107374. .113189
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120660. .126468
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126569. .131619
//note="assembly_fragment"
135610. /note="assembly_fragment"
131619
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131619. .131619
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87899. .99510
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Pred. No. 1.7e-97;
0; Mismatches 18;
                                                     /note="assembly_fragment" 99611. .107273
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144333. .148902
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149003. .152918
/note="assembly_fragment"
153019. .156399
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Best Local Similarity 96.3%;
Matches 488; Conservative
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Homo sapiens chromosome 18 clone RP11-839023 map 18p11.3, WORKING DRAFT SEQUENCE, 32 unordered pieces.
                  /note="assembly_fragment clone_end:SP6 vector_side:left" 165219, .167480 /note="assembly_fragment" 167581, .169986
                                                                                                        /note="assembly_fragment"
170087. 171909
/note="assembly_fragment"
172010. 172317
/note="assembly_fragment clone_end:T7 vector_side:right"
172418. 174663
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 188255)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db 123478 AGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCTGGCCC 123537
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126 AGGTCCACCGGGCCCCCAGGGGTCCAAGAGTGACAGAGGATCCCAGGGACCCCTGGCCC 185
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| 34911 c 36303 g 50935 t
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HTG, HTGS_PHASE1; HTGS_DRAFT.
HOMO sapiens DNA, clone:RP11-839023.
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AP000939/c
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This record will be updated with the finished sequence as soon as it is available and the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                156206 1562048: contig of 5843 bp in length 156206 162048: contig of 5843 bp in length 162049 1652148: gap of 100 bp 162149 155218: contig of 2970 bp in length 165119 165218: gap of 100 bp 165219 167880: contig of 2262 bp in length 167481 165880: gap of 100 bp 167880: length 167881 169986: contig of 2406 bp in length 169987 170086: gap of 100 bp 170087 171999; contig of 1833 bp in length 170087 171999; contig of 1833 bp in length 170087 170086: gap of 100 bp
                                                                                 24284 24383: gap of 100 bp
24384 46875: contig of 22492 bp in length
46876 46975: gap of 100 bp
46976 65058: contig of 18083 bp in length
65059 65158: gap of 100 bp
65159 81322: contig of 16164 bp in length
                                                                                                                                                                       65059 65158: gap of 100 bp 65159 81322: contig of 16164 bp in length 81323 81423 gap of 100 bp 14423 gap of 100 bp 14423 gap of 100 bp 16824 98923: gap of 100 bp 16924 98924 gap of 100 bp 11145 bp in length 16664 111068: contig of 11145 bp in length
                                                                                                                                                                                                                                                                                                                                             122717 122816: gap of 100 bp
122817 133089: contig of 10273 bp in length
133090 133189: gap of 100 bp
133190 141206: contig of 8017 bp in length
                                                                 24283: contig of 24283 bp in length
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176372 178022: contig of 1651 bp in length.
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1. .178022
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* arbitrary. Gaps between the contigs are represented as * runs of N, but the exact sizes of the gaps are unknown. * This record will be updated with the finished sequence * as soon as it is available and the accession number will * be preserved.
                                      NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105779 106678; gap of 100 bp in length 113050 113149; gap of 100 bp in length 113050 113149; gap of 100 bp in length 113150 11349; contig of 6571 bp in length 113150 119201; contig of 6522 bp in length 119302 1126581; gap of 100 bp in length 126583 126682; gap of 100 bp in length 132071 132170; gap of 100 bp in length 132071 137138; contig of 588 bp in length 137139 137238; gap of 100 bp in length 143056 143155; sap of 100 bp in length 143056 143155; sap of 100 bp in length 143056 143155; gap of 100 bp in length 148640 148739; gap of 100 bp in length 148640 158086; contig of 4347 bp in length 158087 15186; gap of 100 bp in length 153087 15186; gap of 100 bp in length 153087 15186; gap of 100 bp in length 153087 15186; gap of 100 bp in length 158082 155021; gap of 100 bp in length 15822 155021; gap of 100 bp in length 1
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                                                                                                                                                                                                                                                                                                                                                                                                             16097 16196: gap of 100 bp
16197 33789: contig of 17593 bp in length
33790 33889: gap of 100 bp
33890 51010: contig of 17121 bp in length
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181165 182735: contig of 1571 bp in length
182736 182835: gap of 100 bp
182836 183923: contig of 1088 bp in length
183924 184023: gap of 100 bp
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of 9581 bp in length
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            Sequence updated (26-May-2000)
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84737: contig
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                                                                                                              Published Only in Database (1999)

2 (bases 1 to 188255)

Hattori,M., Ishil,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totokl,Y., Watanabe,H. and Sakaki,Y.
Direct Submission
Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC);
Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-8555,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NOTE: This is a 'working draft' sequence. It currently consists of 32 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
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Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo sapiens 188,255 genomic DNA of 18p11.3
                                                                                                                                                                                                                                                                                                                                                                                                                 Kitasato Univ., 1-15-1 Kitasato, Sagamihara, Kanagawa 228-Japan (E-Mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-42-778-9923, Fax:81-42-778-9924) On May 31, 2000 this sequence version replaced gi:6997751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chemistry: Dye-terminator ET-amersham; 100% of reads Assembly program: Phrap; version 0, 990329 Consensus quality: 171068 bases at least 040 Consensus quality: 178865 bases at least 030 Consensus quality: 178865 bases at least 030 Insert size: 185155; sum-of-contigs Quality coverage: 4.41x in 020 bases; sum-of-contigs
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------ Summary Statistics
Sequencing vector: PCR products; 100% of reads
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Web site: http://hgp.gsc.riken.go.jp/
Contact: hattori@gsc.riken.go.jp
------- Project Information
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Pred. No. 8.2e-91;
0; Mismatches 101; Indels
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/note="assembly_fragment"
13729. .143055
/note="assembly_fragment"
143156. .148639
/note="assembly_fragment"
                                                                                                                                                           1. .16096
/note="assembly_fragment"
                                                                                                                           16197. .33789
/note="assembly_fragment"
1. .188255
/organism="Homo sapiens"
/db_xref="taxon:9606"
/chromosome="18"
                                                             /map="18p11.3"
/clone="RP11-839023"
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Best Local Similarity 81.3%; Pre
Matches 438; Conservative 0;
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116, App
94, Appl
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647, App
726, App
624, App
693, App
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63, Appl
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96, Appl
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Patent No. 5773249
GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
TITLE OF INVENTION: Protein Polymers
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
CITY: San Francisco
STREET: California
COUNTRY: USA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouery Match 9.0%; Score 121.6; DB 1; Length Best Local Similarity 53.9%; Pred. No. 3.7e-22; Matches 250; Conservative 0; Mismatches 214; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: USA
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.30
CURREWY APPLICATION DATA:
APPLICATION NUMBER: US/08/642,255
           US-09-453-702B-66
US-09-404-089A-372
US-09-134-001C-726
US-09-134-001C-624
US-09-134-001C-624
US-09-134-001C-624
US-09-134-001C-634
US-09-453-702B-116
US-09-453-702B-137
US-09-453-702B-137
US-09-453-702B-137
US-09-453-702B-137
US-08-147-509B-98
US-08-147-509B-98
US-08-377-509B-98
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NAME: ROWLAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A55556-3/BIR
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8771
TELEPAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 60:
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LENGTH: 810 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
CLASSIFICATION: 435
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MOLECULE TYPE:
DESCRIPTION:
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Sequence 4, Appli
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Sequence 39, Appli
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Sequence 48,
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                                                                                                            March 21, 2003, 02:00:05; Search time 47.7621 Seconds
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
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/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
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S-08-794-795-5
S-08-749-200-5
S-08-749-795-1
S-09-249-200-1
S-09-029-348-20
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S-08-893-467A-1
S-08-555-669-11
S-09-073-663-11
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-08-155-888-1
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US-09-297-269-40
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US-08-494-168-1
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US-09-439-897-1
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1355
               GenCore version
Copyright (c) 1993 - 2003
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Maximum Match 100%
Listing first 45 summaries
                                                                             - nucleic search, using sw model
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102 ACCACCGGGTGCACCTGGCCCAGCGGGTCCGCCTGGATCTAGAGGTGACCCAGGACCGCC 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                         462 ATCTAGAGGTGACCCAGGACCGCCTGGTGCTCCGGGACCTGCAGGCCCACCGGGTAGCCG 521
                                     162 TGGTGCTCCGGGACCTGCAGGCCCACCGGGTAGCCGTGGCGATCCGGGACCACCGGTGC
                                                                                                                                    360 GGGCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCC
                                                                                                              240 TGCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGCGTGGCGGAAAGG
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APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540 CGCCCTCCTGCCCCATCAGGAGCGGTGGTGCCCTGGCCTGC 583
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APPLICATION NUMBER: US/08/642,255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: 45556-3/BIR
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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Patent No. 5773249
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TELEFAX: (415) 494-871
TELEEX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
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LENGTH: 756 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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                                                      Gaps
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                                                                                                                                                                                                            187 ACTGGCAACAAGGGACAGAAAGGAGAAGGGGGGGGGGCCTGGACCTGGCCCTGCGGGT
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  Length 756;
Score 118; DB 1; Length 75
Pred. No. 3.1e-21;
0; Mismatches 200; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: DILWORTH & BARRESE
333 EARLE OVINGTON BOULEVARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/08/655,086 FILING DATE: 03-JUN-1996 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08655086
Patent No. 5821089
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NAME: STEEN, DEFREYS S.
REGISTRATION NUMBER: 32,063
REFERENCE/DOCKET NUMBER: 203-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 516-228-8484
TELEPHONE: 516-228-8516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: GRUSK'IN, ELLIOTT A.
APPLICANT: BUECHTER, DOUGLAS
APPLICANT: ZHANG, GUANCHUI
APPLICANT: CONNOLLY, KEVIN
Query Match 8.7%;
Best Local Similarity 54.3%;
Matches 238; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       547 CCTGGCCCATCAGGAGCG 564
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES: 5
CORRESPONDENCE ADDRESS:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
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COUNTRY:
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US-08-655-086-1
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Length 432

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283 GAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAGGGCCCCCAAAGGCTCCCGTGGTTCCCCT 342
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                                                                                                                                                                                                                                                                                                                    Score 106; DB 1; Length 43
Pred. No. 3e-18;
0; Mismatches 185; Indels
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Patent No. 6771827
GENERAL INFORMATION:
APPLICANT: THE VITORIA UNIVERSITY OF MANCHESTER;
TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: d087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.0
                    A55556-3/BIR
                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                                                                                                                                                                                             .;
0
  20,015
                    REFERENCE/DOCKET NUMBER: A5
TELECOMMUNICATION INFORMATION:
                                                     TELEPHONE: (415) 494-8700
TELERAX: (415) 494-8771
TELEX: 910 277299 FHT UR
INFORMATION FOR SO 1D NO. 48:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                      Query Match 7.8%;
Best Local Similarity 54.0%;
Matches 217; Conservative
                                                                                                                                                         LENGTH: 432 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
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Best Local Similarity 52.8
Matches, 229; Conservative
    REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) OTHER INFORMATION:
) OTHER INFORMATION:
US-09-029-348-19
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LENGTH: 1608
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                                                                                                                                                                                                                                                                               104 CTGGTCCCCAAGGCTTCCCAAGGCTTCCAAGGTCCCCCTGGTGAGCCTGGCGAGCCTGGA 163
                                                                                                                                                                                                                                                                                                                                                                                                  GGGGAGCCTGGACCACCTGGCCCTGCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCC 276
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                                                                                                                                                               Length 3181;
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                                                                                                                                                                                                    Indels
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APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                  0; Mismatches 224;
                                                                                                                                                             DB 1;
                                                                                                                                                           Score 113.6; DB 1
Pred. No. 7.6e-20;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 48, Application US/08642255
Patent No. 5773249
GENERAL INFORMATION:
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IBM PC compatible
                                                                                                                                                             Query Match 8.4%;
Best Local Similarity 52.5%;
Matches 248; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROWLAND, Bertram I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
                  LENGTH: 3181 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
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                                                                          TOPOLOGY: unknown ; MOLECULE TYPE: CDNA US-08-655-086-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC
OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
STREET: 4
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TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCA 186
                                              361 GGTGAACCTGGTCAAACTGGTCCTGCAGGTGCACCTGGTCCTCATGGCCCCGTGGGTCCT 420
                                                                                                                                                  247 GAGAGAGGCCCAATTGGACCAGCTGGTCCCCCGGAGAGGGTGGCGGCAAAGGATCTAAA 306
                                                                                                                                                                                                                                                                                         367 AGTGGGGACCCAGGCCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGGCCTCAGGGC 426
                                                                                                                                                                                                                                                                                                                                                           CCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGGACCTCGG 486
                                                                                                               421 GCTGGCAAACATGGAAACCGTGGTGAAACTGGTCCTTCTGGTCCTGTTGGTCCTGCTGGT
                                                                                                                                                                                                                      307 GCTCCCAGGCCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAGGGCCCC
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                                                                               187 ACTGGCAACAAGGGACAGAAAGGAGAGAGGGGGGAGCCTGGACCACCTGGGCCCTGCGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Reeders, Stephen T.
APPLICANT: Zhou, Jing
TITLE OF INVENTION: Collagen COL4A6: Gene, Protein and Method
TITLE OF INVENTION: of Detecting Collagen Deficiency
NUMBER OF SEQUENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEE: Foley & Lardner
: 3000 K Street, N.W., Suite 500
Washington, D.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/112,465
FILING DATE: 27-AUG-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/494,168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1, Application US/08494168 Patent No. 5731192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: SAXE, Bernhard D. REGISTRATION NUMBER: 28,665
REFERENCE/DOCKET NUMBER: 40:
TELECOMMUNICATION:
TELEPHONE: (202)672-5300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 5102 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   547 CCTGGCCCATCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RY: USA 20007-5109
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                                                                                                                                                                                                                                                                                                     2380 AAATGGTGCTCCGGGGGACAAAGGCTACAAGGATTAACAGGGCACAAAGGATTTCTTGG 2439
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                                                                                                                                                                                                                                                                                                                                                                      363 CCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGCCCTCA 422
                                                                                                                                                                                                                                    Gaps
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APPLICANT: Reeders, Stephen T., Morrison, Karen E., Hudson, Billy APPLICANT: G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243 GGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATC
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STREET: 246 Church Street
                                                                                        join(2..82, 86..97, 101..4399, 4403..4420, 4424
..4465, 4469..4876, 4880..5101)
                                                                                                                                                                                 Length 5102;
                                                                                                                                                                                 h 7.4%; Score 100; DB 1; Length 51 Similarity 52.4%; Pred. No. 3e-16; 20; Conservative 0; Mismatches 200; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alpha-3 Chain Type IV Collagen
Polynucleotides
23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA: No. 5424408 applicable ATTORNEY/AGENT INFORMATION: NAME: Barth, Richard S. REGISTRATION NUMBER: 28180
                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US/07/621,091G
FILING DATE: 11/30/90
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900983/RB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: Apple Macintosh OPERATING SYSTEM: Macintosh OS7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/07621091G
Patent No. 5424408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Microsoft Word 5.1a CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 28180
REFERENCE/DOCKET NUMBER: 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Connecticut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
                        linear
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STRANDEDNESS:
TOPOLOGY: lir
FEATURE:
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                                                                                      CCATION:
COCATION:
US-08-494-168-1
                                                                     NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
US-07-621-091G-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: Nev
STATE: Co
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Length 1416;

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127 GGTCCACCGGGCCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCA 186
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| Sequence | Application US/09167364 |
| Patent No. 6007980 |
| Patent No. 6007980 |
| Patent No. 6007980 |
| GENERAL INFORMATION: |
| APPLICANT: Reders, Stephen T |
| APPLICANT: Morrison, Karen E |
| APPLICANT: HOUSON, Blilly G |
| TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides |
| FILE REFERENCE: 9512638 |
| CURRENT APPLICATION NUMBER: US/09/167,364 |
| CURRENT FILING DATE: 1998-10-07 |
| EARLIER APPLICATION NUMBER: 08/399889 |
| SARLIER FILING DATE: 1005: 25 |
| NUMBER OF SEQ ID NOS: 25 |
| NUMBE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 7.4%; Score 99.6; DB 2; Length 1 Best Local Similarity 51.6%; Pred. No. 2.2e-16; Matches 228; Conservative 0; Mismatches 214; Indels
                                          US/08/399,889B
         FILE REFERENCE: 951263A
CURRENT APPLICATION NUMBER: US/08/399
CURRENT FILING DATE: 1995-03-07
EARLIER APPLICATION NUMBER: 07/621091
EARLIER FILING DATE: 1990-11-30
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATENTIN Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: CDS
; LOCATION: (1)..(1416)
US-08-399-889-1
                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Calf
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LENGTH: 1416
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APPLICANT: Reeders, Stephen T
APPLICANT: Morrison, Karen E
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7.4%; Score 99.6; DB 1; Length 1
51.6%; Pred. No. 2.2e-16;
tive 0; Mismatches 214; Indels
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T: No. 5424408 known
mTON: No. 5424408e
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 972-1400
TELEFAX: (212) 370-1622
TELEX: 236268
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1416 base pairs
TYPE: NUCLEIC acid
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                                                                                                                                                                                                                                                   TUPOLOGY: Linear
MOLECULE TYPE: CDNA to MRNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LIBRARY: Bovine lens cDNA CLONE: KMC15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CELL TYPE: Whole kidney IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 51.69
Matches 228; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHROMOSOME/SEGMENT: NO PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEVELOPMENTAL STAGE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLONE: KMC15
POSITION IN GENOME:
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ORGANISM: Unknown
                                                                                                                                                                                                                                                                                                                                                                                    ORIGINAL SOURCE:
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24,175
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TELEFAX: (216) 241-1666
TELEX: (216) 240-165
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1868 base pairs
TYPE: NUCLEIC acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Minnich, Richard J.
REGISCRATION NUMBER: 24,175
REFERENCE/DOCKET NUMBER: 1
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Word Perfect 5.1 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Tryggvason, Karl
APPLICANT: Elomaa, Outi
APPLICANT: Kangas, Maarit
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CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Minnich, Richard J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
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STATE: Ohio
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Patent No. 6277558
GENERAL INFORMATION:
GARGAL INFORMATION:
Allly GAPLICANT: Hudson, Billy GAPLICANT: Hudson, Alpha-3 Chain Type IV Collagen Polypeptides FILE REFERENCE: 95-1263-C
CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEC ID NOS: 65
                                                                                     Length 1416;
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                                                                                   Score 99.6; DB 3; Length 1.
Pred. No. 2.2e-16;
0; Mismatches 214; Indels
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Pred. No. 2.2e-16;
0; Mismatches 214;
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51.68;
                                                                                                       Best Local Similarity 51.6
Matches 228; Conservative
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; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)..(1416)
US-09-167-364-1
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US-09-439-897-1
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Best Local Similarity
Matches 228; Conserv
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US-09-439-897-1
                                                                                      Query Match
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TITLE OF INVENTION: No. 5691197el Macrophage Receptor with TITLE OF INVENTION: a Collagenous Domain and the TITLE OF INVENTION: such a Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Fay, Sharpe, Beall, Fagan,
ADDRESSEE: Minnich & McKee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U.S.A.
ZIP: 44114-2518
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 720 Kb storable
COMPUTER: IBM PS/2, Model 35 SX
OPERATING SYSTEM: DOS 5.0
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                                                                                                                            / Match 7.3%; Score 99.4; DB 1; Length 1868; Local Similarity 51.5%; Pred. No. 2.8e-16; les 229; Conservative 0; Mismatches 216; Indels 0
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GENERAL INCOMENTALION:
APPLICANT: Tryggvason, Karl
APPLICANT: Blomaa, Outi
APPLICANT: Blomaa, Outi
APPLICANT: Rangas, Maarit

TITLE OF INVENTION: An Insolated DNA Sequence For a
TITLE OF INVENTION: An Olivagenous Domain and the
TITLE OF INVENTION: a Collagenous Domain and the
TITLE OF INVENTION: Such a Sequence
STREET: SEQUENCES: 2
CORRESPONDENCES: Sharpe, Beall, Fagan,
ADDRESSEE: Mainich & McKee
STREET: 1100 Superior Avenue
STREET: Slitte 700
STRANDEDNESS: Single
TOPOLOGY: Linear
MOLECULE TYPE: Nucleotide-genomic DNA
MADPOTHETICAL: No. 5691197 relevant
ANTI-SENSE: No. 5691197 relevant
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MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 720 Kb storable
COMPUTER: IBM PS/2, Model 35 SX
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OPERATING SYSTEM:
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44114-2518
                                                                          ; ANTI-SENSE:
US-08-392-367B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-08-893-467A-1
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Matches
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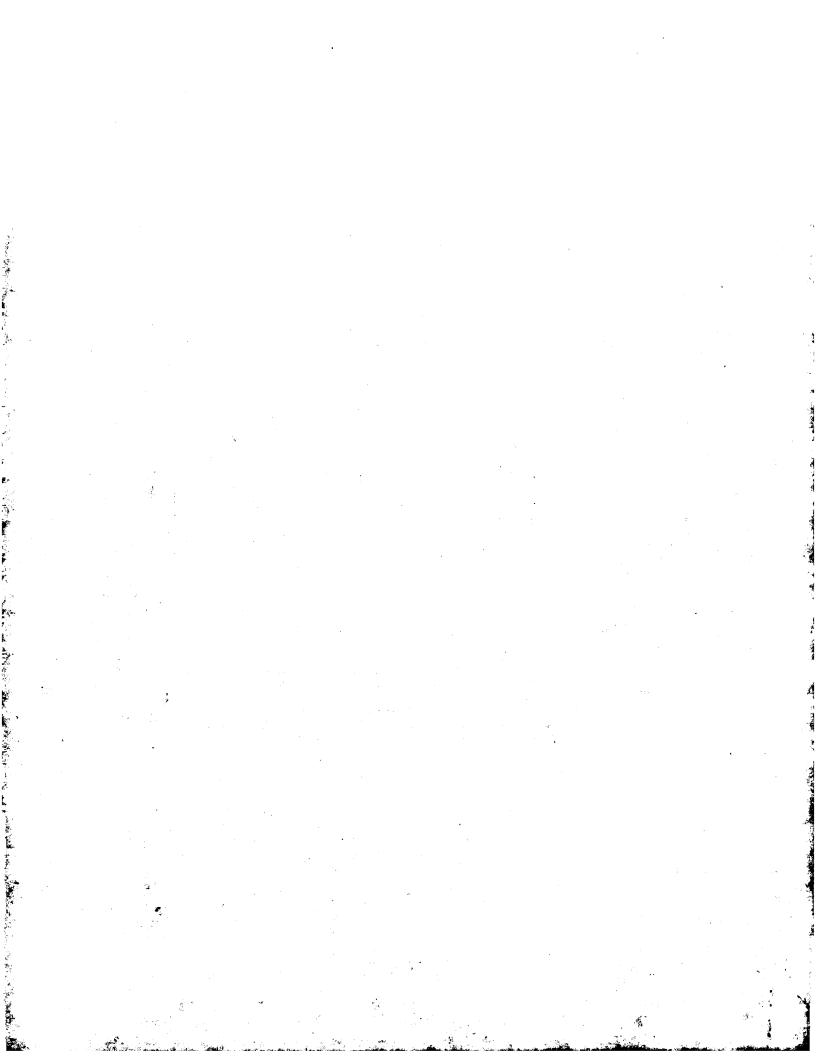
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GGTTTGGCTGGATCTCCAGGAGTCAAAGGTGACCAAGGAAAACCTGGAGTGCAGGGTGTT 1080
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APPLICANT: Brewton, Richard G.
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 7.3%; Score 99.4; DB 3; Best Local Similarity 51.5%; Pred. No. 2.8e-16; Matches 229; Conservative 0; Mismatches 216;
                                                                                                                      NAME: Minnich, Richard J.
REGISTRATION NUMBER: 24,175
RELECOMMUNICATION NUMBER: TRV 2 009
TELECOMMUNICATION INFORMATION:
TELEFAX: (216) 241.1666
TELEFX: (216) 241.1666
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE: Nucleotide-genomic DNA HYPOTHETICAL: No. 6063901 relevant ANTI-SENSE: No. 6063901 relevant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                     US/08/893,467A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               544 CCTCCTGGCCCATCAGGAGCGGTGG 568
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Patent No. 5773248
                                                                                                   ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1868 base pairs
TYPE: Nucleic acid
CURRENT APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                                                                                                    Single
                                                                        CLASSIFICATION: 435
                     APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Linear
                                                                                                                                                                                                                                                                                                                                                                                            TYPE: Nucleic
STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-893-467A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-555-669-11
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Patent No. 6127523
GENERAL INFORMATION:
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LOCATION:
                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-073-663-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                       SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/555,669
FILING DATE: 13.NOV-1995
                                                                                                                                                                                                                                                                                      8389-030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1004 GAGGCTGGTCGCAACGGTGCTCCGG 1028
                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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US-09-073-663-11
; Sequence 11, Application US/09073663
                                                                                                                                                                                                                         CLASSIFICATION: 433
ATTORREY AGENT INFORMATION:
NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 8389-
TELECOMMUNICATION INFORMATION:
TELEFAX: 415-854-366
TELEFAX: 415-854-369
TELEFX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 2543 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 51.5%
Matches 229; Conservative
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47..2098
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                New York
                                                                                                                                                                                                                 CLASSIFICATION:
New York
                                 USA
                                                  10036
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LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-555-669-11
                                 COUNTRY:
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124 CAAGGTCCACCGGGCCCCAGGGGTCCAAGAGTGACAGAGGATCCCAGGGACCCCCTGGC 183
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 764 CTCGGGCCCCCTGGGGACCGGGGTCCCATTGGGTTCCGAGGGCCGCCTGGGATCCCAGGA 823
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 7.3%; Score 99.4; DB 3; Length 2543; Best Local Similarity 51.5%; Pred. No. 3.2e-16; Matches 229; Conservative 0; Mismatches 216; Indels 0
APPLICANT: Brewton, Richard G.
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
CORRESPONDENCE: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
NAME: Benjamin Aaron Adler, Ph.D., J.D.
REGISTRATION NUMBER: 35,423
REGISTRATION NUMBER: D5913D
TELECOMUNICATION INFORMATION:
TELECOMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh OS 8.1
SOFTWARE: Microsoft WORD for Macintosh
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,663
                                                                                                                                              E: McGregor & Adler, LLP
8011 Candle Lane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEPHONE: (713) 777-2321
TELEFAX: (713) 777-6908
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 2543 base pairs
                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unknown
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47..2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: unkno
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                                                                                                                                                                       STREET: 8011 (CITY: Houston
                                                                                                                                                                                                CITY: Houston
STATE: Texas
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              928
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  55 GTGATTATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTT 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  227 GACCACCTGG------CCCTGCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               281 GAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  170 ---AGGGACCCCCTGGCCCAACTGGCAACAAGGGACAGAAAGGAGAAAGGGGGAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 7.2%; Score 97.6; DB 4; Length 4359; Best Local Similarity 52.3%; Pred. No. 1.2e-15; Matches 272; Conservative 0; Mismatches 234; Indels 14
                                                                                                                                                                                                                                                                                                                                                                                     ); NAME/KEX: misc_feature
; OTHER INFORMATION: Incyte ID No. 6426186 331365 (1553795CB1)
US-09-484-970B-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              521 CAGGCCCCAAGGGCCCCCCGGCCCTCCTGGCCCATCAGG 560
                                                                                                                                    GREEAL INFORMATION:
APPLICANT: JONES, Karen A.
APPLICANT: JONES, Karen A.
APPLICANT: JONES, Karen A.
TITLE OF INVENTION: BONE REMODELING GENES;
FILE REFERENCE: PP-0014 US
CURRENT PPLICATION NUMBER: US/09/484, 970B
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SOFTWARE: PERL PROGRAM
SEQ ID NO 4
LENGTH: 4359
                     1004 GAGGCTGGTCGCAACGGTGCTCCGG 1028
544 CCTCCTGGCCCATCAGGAGCGGTGG 568
                                                                                                            Sequence 4, Application US/09484970B Patent No. 6426186
                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                             RESULT 15
US-09-484-970B-4
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Search completed: March 21, 2003, 08:26:12 Job time : 66.7621 secs



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TYPE: nucleic acid
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                                                      Sequence 198, App Sequence 782, App Sequence 784, App Sequence 57, App1 Sequence 64, App1 Sequence 64, App1 Sequence 206, App Sequence 206, App Sequence 22, App1 Sequence 22, App1 Sequence 25, App Sequence 26, App Sequence 26, App Sequence 264, App Sequence 786, App Sequence 6, App1 Sequence 786, App Sequence 762, App Seq
                                                                                                                           March 21, 2003, 01:57:56 ; Search time 206.471 Seconds (without alignments) 5089.177 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                  1 atgcaacaagatttgatgag......agaaaaaggttatcatcccg 1355
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2: /cgn2_6/ptodata/1/pubpna/PCT_WINE_PUB.seq:*
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                                                                                                                                                                                                                                                                                                                                                                                       1077652
                GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.
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0 US-09-954-456-1975

0 US-09-954-456-1975

0 US-09-924-340-57

US-09-925-600A-57

US-09-925-301-42

US-09-925-301-42

US-09-925-299-206

US-09-954-511-961

US-09-954-551-961

US-09-954-456-786
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Maximum Match 100%
Listing first 45 summaries
                                                                                          nucleic search, using sw model
                                                                                                                                                                                                                                                                                      IDENTITY_NUC Gapop 10.0 , Gapext 1.0
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length: 2000000000
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Perfect score:
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Maximum DB
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sequence 98, Appl
Sequence 3685, Appl
Sequence 13, Appl
Sequence 613, Appl
Sequence 613, Appl
Sequence 613, Appl
Sequence 331, Appl
                                                     448,
     Sequence 104
                                     Sequence
                     Sequence
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Treacy, Maurice
Spaulding, Vikk
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM DC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 18-Jun-2000
CLASSIFICATION: CUMMER: US/09/745,763
CLASSIFICATION: CUMMONN
12 US-10-044-090-104

10 US-09-925-302-247

10 US-09-925-302-247

11 US-10-001-835-98

12 US-10-001-835-98

13 US-09-9860-107-3685

14 US-09-9860-107-3685

15 US-09-978-192A-613

16 US-09-978-192A-613

17 US-09-978-192A-613

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17 US-09-978-192A-613

17 US-09-978-193-613

17 US-09-978-193-613

17 US-10-175-738-331

17 US-10-175-738-331

17 US-10-175-738-331

18 US-10-175-738-331

18 US-10-176-757-331

19 US-10-176-757-331

10 US-10-176-757-331

10 US-10-176-757-331

10 US-10-176-757-331

10 US-10-180-552-331

10 US-10-180-552-331

10 US-10-180-552-331

10 US-10-180-552-331

10 US-10-176-757-331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Genetics Institute, STREET: 87 CambridgePark Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Sprunger, Suzanne A.
REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
INFORMATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence 198, Application US/09745763 Patent No. US20020065394A1 GENERAL INFORMATION: APPLICANT: Jacobs, Kenneth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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COUNTRY: U.S.A.
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APPLICANI TOURY ADDITION PROCESS for Identifying Anti-Cancer Therapeutic Agents Using C TITLE OF INVENTION: Sets
FILE REFERENCE: 68920-76
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR PLING DATE: 2000-09-18
PRIOR PLING DATE: 2000-09-18
PRIOR PLING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-26
PRIOR PRICATION NUMBER: US/60/235,637
PRIOR PRILICATION NUMBER: US/60/235,711
PRIOR PRILICATION NUMBER: US/60/235,711
PRIOR PRILICATION NUMBER: US/60/235,711
PRIOR PRILICATION NUMBER: US/60/235,711
PRIOR PRILING DATE: 2000-09-27
                                                                  GCATTATAACGGACTGTGATGGGATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGG
                             2405 CCAATTACTGAAAAAAAATGACAGCTAGTGTTTTTTACCATCCGTCATTACCCAAGAC
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PRIOR FILING DATE: 2000-09-27
WHMBER OF SEQ ID NOS: 2276
SOFTWARE: Patentin version 3.0
SEQ ID NO 1975
                                                                                                                                                                                                                                                                                                                                                                                                                               US/09954456
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THER INFORMATION: n=a,t,g
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APPLICANT: Young, Paul
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                                                                                Length 2930
                                                                                                           Indels
                                                                               DB 10;
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                                                                               Score 1335.8;
Pred. No. 0;
                                                                                                         0; Mismatches
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID NO: 198:
                                                                             98.68;
                                                                                                        Matches 1348; Conservative
                                                                                             Similarity
                                                    US-09-745-763-198
                                                                               Query Match
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Patent No. US20020142981A1

GENERAL INFORMATION:

APPLICANT: HORNEL DATE:

APPLICANT: Vockley, Joseph G.

APPLICANT: Scherf, Uwe

APPLICANT: Scherf, Uwe

TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer;

FILE REFERENCE: 44921-5028-WO

CURRENT APPLICATION NUMBER: US/09/880,107

CURRENT FILING DATE: 2001-06-14

PRIOR PLICATION NUMBER: US 60/211,379

PRIOR FILING DATE: 2000-06-14

PRIOR FILING DATE: 2000-10-02

NUMBER OF SEQ ID NOS: 3950

SOFTWARE: Patentin Ver. 2.1
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US-09-880-107-3946
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ORGANISM: Homo sapiens
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US-09-880-107-3946
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LENGTH: 6728
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GENERAL INTERMATION:

TITLE OF INVENTION: Sets

CURRENT FILING DATE: 2001-09-18

FRIOR PAPLICATION NUMBER: US/60/234,052

PRIOR APPLICATION NUMBER: US/60/234,052

PRIOR FILING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US/60/234,923

PRIOR FILING DATE: 2000-09-25

PRIOR FILING DATE: 2000-09-25

PRIOR FILING DATE: 2000-09-25

PRIOR FILING DATE: 2000-09-26

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2000-09-27

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,720

PRIOR FILING DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,840

PRIOR FILING DATE: 2000-09-27

PRIOR PRILING DATE: 2000-09-27

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                                     Gaps
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9.1e-19;
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      No. 1.3e-55;
                               0; Mismatches
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53.0%; Pred. No. 9
      Pred.
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Patent No. US20020115057A1
GENERAL INFORMATION:
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SEQ ID NO 782
LENGTH: 6728
   95.3%;
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NUMBER OF SEQ ID NOS: 2276
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al Similarity 95.3
266; Conservative
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US4.DIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/992,600A CURRENT PEPLICATION NUMBER: US/09/992,600A CURRENT FILING DATE: 2001-11-13
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-16
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 57, Application US/09992600A Publication No. US20030027161A1 GENERAL INFORMATION:
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Matches 267; Conservative
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1118..1133
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US-09-992-600A-57
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LOCATION:
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FITLE OF ENVEWINTON: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.052.REG
CURRENT APPLICATION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
CURRENT FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-06-19
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-25
PRIOR FILING DATE: 2001-06-25
PRIOR FILING DATE: 2001-06-25
PRIOR FILING DATE: 2001-06-25
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Publication No. US20030027248A1
GENERAL INFORMATION:
APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
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LENGTH: 1133
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US-09-924-340-57
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Patent No. US20020523081
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REPERENCE: PA106
CURRENT APPLICATION NUMBER: US/09/925,301
CURRENT FILING DATE: 2001-08-10
PRIOR PAPLICATION NUMBER: PCT/US00/05882
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1694
SOFTWARE: PatentIn Ver. 2.0
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Fatent No. US20020044941A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and FILE REFERENCE: PA104
CURRENT FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05918
PRIOR FILING DATE: 1999-03-12
PRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 896
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LOCATION: (2653)
OTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc feature
LOCATION: (2667)
OTHER INFORMATION: n equals a,t,g, or c
LOCATION: (2683)
OTHER INFORMATION: n equals a,t,g, or c
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FEATURE:
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SEQ ID NO 64
LENGTH: 2691
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APPLICANT: Horder, Darci T.
APPLICANT: Wockley, Joseph G.
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
FILE REPERENCE: 44921-5028-W0
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR APPLICATION NUMBER: US 60/231,379
PRIOR FILING DATE: 2000-06-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches 235; Indels
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Patent No. US20020142981A1
GENERAL INFORMATION:
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Best Local Similarity 51.3
Matches 248; Conservative
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LOCATION: (1)..(5086)
OTHER INFORMATION: n =
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US-09-880-107-3947
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LENGTH: 5086
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                                                                                              420 TCAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 206, Application US/09925299
Fublication No. US2030040617A9
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PAIO2
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILING DATE: 2001-08-10
FRIOR PELING DATE: 2000-03-08
FRIOR PELING DATE: 1999-03-12
FRIOR APPLICATION NUMBER: 60/124,270
FRIOR APPLICATION NUMBER: 60/124,270
FRIOR APPLICATION NUMBER: 50/124,270
FRIOR SEQ ID NOS: 1556
SOFTWARE: PatentIn Ver. 2.0
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LOCATION: (4)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
LOCATION: (17)
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LOCATION: (5126)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
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; OTHER INFORMATION: n equals a,t,g, or
US-09-925-299-206
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LENGTH: 5145
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                                                                           360 GGGCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCC 419
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300 ATCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCA 359
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                                    892 GICTGCTGCCCCCCCCAGGCTTCCCAGGTGCCCCTGGCCCCAAGGGTGAAATTGGARCTGT
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Fatent No. US200200552741
GENERAL INFORMATION:
TITLE OF INFORMATION:
TITLE OF INFORMATION:
CURRENT APPLICATION NUCLEIC Acids, Proteins and Antibodies
FILE REFERENCE: PA102
CURRENT FILING DATE: 2001-08-10
FRIOR FILING DATE: 2001-08-10
FRIOR FILING DATE: 2001-08-10
FRIOR FILING DATE: 1999-03-12
NUMBER OF SEQ ID NOS: 1556
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 206
LENGTH: 5145
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COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_leature
LOCATION: (5126)

COTHER INFORMATION: n equals a,t,g, or c
NAME/KEY: misc_feature
COTHER INFORMATION: n equals a,t,g, or c
US-09-925-299-206
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LOCATION: (4)
OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
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ORGANISM: Homo sapiens
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Sequence 22, Application US/10044090
Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL Program
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                                                                                                           360 GGGCCCCAGTGGGGACCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGCCC 419
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TGCGGGTGAGAGAGGCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGG
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OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
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51.3%; Pred. No. 9e-18;
Mismatches 235;
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ORGANISM: Homo sapiens
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| 1192 AGC 1194
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LENGTH: 5432
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PAPELICANT: Wearatts.

TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using C TITLE OF INVENTION: Gene Sets

FILE OF INVENTION: Gene Sets

FILE REPERRICE: 689200-77

CURRENT APPLICATION NUMBER: US/09/954,531

CURRENT FILING DATE: 2000-05-02

PRIOR PELLING DATE: 2000-09-18

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR PAPLICATION NUMBER: US/60/234,034

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-20

PRIOR FILING DATE: 2000-09-22

PRIOR FILING DATE: 2000-09-22
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1963 CACGGCTGGGCCCCCAGGGGTCCCTGGCTCCCTGGAATCACGGGCCCTCC 2022
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242 CGGGTGAGAGGCCCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match 7.8%; Score 106; DB 9;
Best Local Similarity 52.1%; Pred. No. 1.1e-17;
Matches 236; Conservative 0; Mismatches 217,
                                                                                                                                                                                                                                                                                                                       Sequence 961, Application US/09954531 Patent No. US20020165180Al GENERAL INFORMATION:
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CORGANISM: Homo sapiens
US-09-954-531-961
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APPLICANT: Recipon, Herve
APPLICANT: Cafferkey, Robert
APPLICANT: Sun, Yongming
APPLICANT: Sun, Yongming
APPLICANT: Liu, Chenghua
TITLE OF INVENTION: Compositions and Methods Relating to Breast Specific Genes and PT
FILE REFERENCE: DEX-0269
CURRENT APPLICATION NUMBER: 05/249,998
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-22
NUMBER OF SEQ ID NOS: 137
SOFTWARE: Patentin version 3.1
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420 TCAGGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCCTGG
                                           1342 CTCCGGCCCCGTTGGACCTCCTGGTAATCCTGGAGCAAACGGCCTTACTGGTGCCAAGGG
                                                                                         ACCTCGGGGACTGCCAGGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGGCCCCCC
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Pred. No. 9.6e-18;
0; Mismatches 222;
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Patent No. US20020155464A1
GENERAL INFORMATION:
APPLICANT: Salceda, Susana
APPLICANT: Maclina, Roberto
APPLICANT: Reclipon, Herve
APPLICANT: Cafferkey, Robert
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Best Local Similarity 52.9%;
Matches 256; Conservative (
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Sequence 255, Application US/09964824A

Patent No. US20020102531A1

GENERAL INFORMATION:

APPLICART: HOLIGAN: Stephen

TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu

TITLE OF INVENTION: Sets

TITLE REFERENCE: 689290-73

CURRENT APPLICATION NUMBER: US/09/964,824A

CURRENT APPLICATION NUMBER: US/60/236,033

PRIOR FILING DATE: 2000-09-28

PRIOR PLILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-28

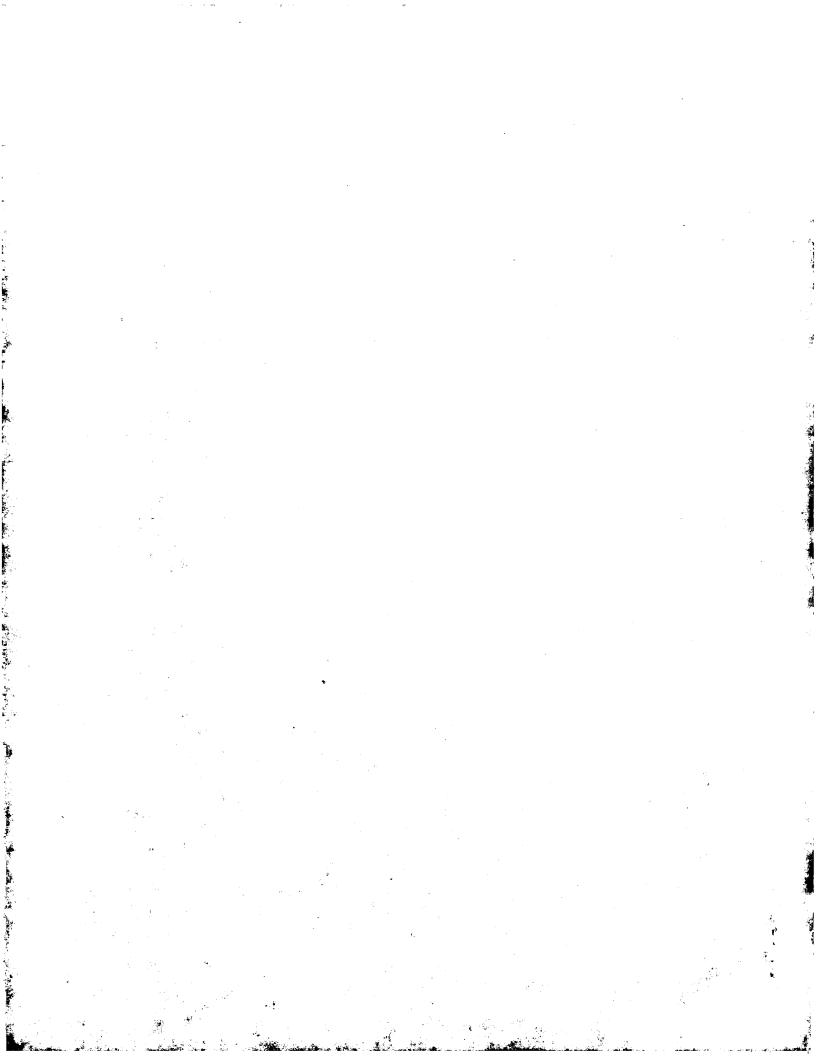
PRIOR FILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-28

PRIOR FILING DATE: 2000-09-28

NUMBER OF SEQ ID NOS: 583

SOFTWARE: PATENTIN VERSION 3.0
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7.8%; Score 106; DB 10; Length 2
Best Local Similarity 52.1%; Pred. No. 1.1e-17;
Matches 236; Conservative 0; Mismatches 217; Indels
                   1050 GTCCCCCTGGGAAAGAGGGAGAGCCAGGGCCTC 1082
542 GCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCC 574
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
CORGANISM: Homo sapiens
US-09-964-824A-255
                                                                                                   RESULT 15
US-09-964-824A-255
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Mus musculus, Similar to scavenger receptor with C-type lectin, clone IMAGE:2811487, mRNA.
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BD955927 AGENCOURT
R74387 Y15711.11
BO021066 U1-H-DH1-
AN74261 w944106.x
AW956627 EST3886703
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AM956627 EST38869703
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AM002141 wt84412.x
AM51140 EST36693
BB774500 QV1-G0006
W76214 ZG58692.r1
AM51277 ZG58692.r1
AM518747 AM5187 AL569543
R74388 Y15711.s1
BE929813 RC3-G0004
BB9743 BB744743
BB97438 N15611.s1
BE929813 RC3-G0004
AM918393 EST349697
BB97791 QV1-G0006
AM918393 EST349697
BB97791 QV1-G0006
AM918393 EST349697
BB77911 QV1-G0006
AM918393 EST349697
BB77911 QV1-G0006
AM918393 EST349697
BB77911 QV1-G0006
AM918393 EST349697
            BM676508 UI-E-EJO-
BM713891 UI-E-EJO-
BM713891 UI-E-EJO-
BL756109 603172765
BE910803 601661855
BG771366 UI-M-FIO-
AL543000 AL543000
BE290299 601089246
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 3305)
Strausberg, R.
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Submitted (05-JUN-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Contact: MGC help desk
Email: cgapb2-remail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Baylor College of Medicine Human Genome
Sequencing Center
Center code: BCM-HGSC
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
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                                                                                                 BE290299
BB248064
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AW956633
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AA304251
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BQ774807 AGENCOURT
BQ713873 AGENCOURT
BQ004176 UI-H-EIO-
AW958053 EST370123
                                                                                              March 21, 2003, 01:34:06; search time 1777.64 Seconds (without alignments) 12344.923 Million cell updates/sec
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             version 5.1.4_p5_4578 - 2003 Compugen Ltd.
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Minimum DB Maximum DB

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                                                        found
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/tissue_type="Mammary tumor. WAP-TGF alpha model. 7 months
                                                                                                                                                                                                                                                                                                                 5;
                                                     Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov.Series: IRAK Plate: 5 Row: h Column: 10
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis
           Hulyk, S.W., Hale, S.M.,
Martin, R.G., Muzny, D.M.
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                            Length 3305;
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Pred. No. 4.5e-173;
0; Mismatches 230;
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757 c 760 g 757 t
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/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
Contact: amg@bcm.tmc.edu
dunaratne, P.H., Garcia, A.M., Lu,
Ycon, V.S., Kowis, C.R., Lawrence,
Richards, S., Gibbs, R.A.
                                                                                                                                                        /organism="Mus musculus'
/db_xref="taxon:10090"
/map="C57BL/6J"
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Best Local Similarity 81.7%;
Matches 1106; Conservative
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1 (bases 1 to 967)

Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-Length cDNA libraries and normalization
Unpublished (2001)

Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: seqref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
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1. .967
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AL568743.1 GI:12923387
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                                          /note="Organ: placenta; Vector: pcwVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-stranded cDNA was digested with Not I and cLoned into the Not I and Eco RV sites of the pcWVSPORT 6 vector. Library was constructed by Life Technologies. Contact: Feng Libng Life Technologies. Contact: Feng Libng Life Technologies. Contact: Feng Libng Life Technologies, a division of Invitrogen 9800 Medical Center Drive Rockville filangelifetech.com URL:

http://fullengeth.invitrogen.com"

221 c 217 g 290 t 17 others
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; Pred. No. 4.5e-145;
13; Mismatches 19;
       /clone="CSODE005YH04"
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                                                                                                                                                                                                     56.3%;
                                                                                                                                                                                                                Local Similarity 95.5
Les 802; Conservative
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1. .668
/organism="Homo sapiens"
/organism="Homo sapiens"
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/clone_lib="NiB_MGC_102"
/clone_lib="NiB_MGC_102"
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/note="Organ: salivary gland; Vector: porB7; Site_1: XhoI;
Site_2: EcoRI; cDNA made by ollgo-dT priming.
Directionally cloned into EcoRIXAho! sites using the
following 5' adaptor: GGGACGAGGG). Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using ZAP-cDNA
synthesis kit (Stratagene) and Superscript II RT (Life
Technologies). Note: this is a NIH_MGC Library."
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                                                                                                                                                mRNA linear EST 15-JUL-2002 sapiens cDNA clone IMAGE:6212672
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National Institutes of Health, Mammalian Gene Collection (MGC)

National Institutes of Health, Mammalian Gene Collection (MGC)

Longbilished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: ATCC

CDNA Library Preparation: Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLCM2377 row: c column: 09

High quality sequence stop: 656.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 668)
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AUTHORS
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JOURNAL
COMMENT
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Musinae; Li (bases 1 to 861)

RS NIH MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

AL Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CONA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI3721 row: n column: 01
High quality sequence stop: 598.
High quality sequence stop: 598.
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AGENCOURT_8482828 NIH_MGC_129 Mus musculus cDNA clone IMAGE:6306240 5', mRNA sequence.
BQ713873
BQ713873.1 GI:21852772
EST.
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/db_xref="taxon:10090"
/clone="linAGE:6306240"
/clone=lib="NIH-MGC_129"
/lab_host="Dhi0B (phage-resistant)"
/note="Organ: olfactory epithelium; Vector:
/note="Organ: olfactory olfact
                                                                                                                                                                                                                                                                                                                                            ACTTCATTIGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTATAACGGACTGTGA 1039
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  GCCTCACAGACTCAGAGGGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGACT
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Pred. No. 3.7e-103;
0; Mismatches 132; Indels 2;
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BQ004176 1723 bp mRNA linear EST 26-MAR-2002 UI-H-EIO-aym-p-04-0-UI.s1 NCI_CGAP_EIO Homo sapiens cDNA clone IMAGE:5840883 3', mRNA sequence.
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National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
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                                                                                TGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATTATGGAAGAAATGA
              14 TGATGAGGTCAAAGTTAGAACTGAAGTGGCCAACTTATCAGTGGTTATGGAAGAGAGTGA
                                                                  AGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCAC
                                                                                                                                   CGGGCCCCCAGGGGTCCCAAGAGGTGACAGAGGATCCCAGGGACCCCCTGGCCCAACTGGCA
                                                                                                                                                     GCCCAATTGGACCAGCTGGTCCCCCCGGAGAGGCGTGGCGGCAAAGGATCTAAAGGCTCCC
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
Mammalia; Butheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 723)
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BQ004176.1 GI:19729076
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01-JUN-2000

Gay, C., Holt and

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AW958053 552 bp mRNA linear EST 01-JUN-200
EST370123 MAGE resequences, MAGE Homo sapiens cDNA, mRNA sequence.
AW958053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Assessment of gene expression patterns in a model of colon tumor metastasis using a 19,200 element cDNA microarray Unpublished (2000)

Contact: John Quackenbush
The Institute for Genomic Research
712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fex: 301 838 0208
                                         GGGTGATATGCTGATTTTCATTGTGCACATGGACTGAATCACATAGATTCTCCTCCGTCA 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 GCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGAGAGACACTGTGCTGGGTTG 360
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Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hegde, P., Qi, R., Abernathy, K., Dharap, S., Gaspard, R.,
'I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. a
Quackenbush, J.
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/organism="Homo sapiens"
/db_xref="taxon:9606"
/clone_lib="MAGE resequences, MAC
/note="Vector: pBluescriptSKm"
/17 c 143 g 121 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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Mammalia; Eutheria; Primates;
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Plate: 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 552)
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AW958053
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                                                                                                                                                                                                                                                                                    /db_xref="taxon:9606"
/clone="IMAGE:5840883"
/clone="IMAGE:5840883"
/clone="Lib="worLcGAP_EIO"
/tlssue_type="Chondrosarcoma"
/dev_stage="Adult"
/lab_host="DH108 (Life Technologies)"
/note="Organ: Left Pelvis; Vector: pT773-Pac (Pharmacia)
/note="Organ: Left Pelvis; Vector: pT773-Pac (Pharmacia)
/note="Organ: Left Pelvis; Vector: pT773-Pac (Pharmacia)
/note="Organ: Left Pelvis; Site_1: EcoR I; Site_2: Not I;
NCI_CGAP_EIO is a cDNA library containing the following
tissue(s): Chondrosarcoma. The library was constructed
according to Bonaldo, Lennon and Soares, Genome Research,
6:791-806, 1996. First strand cDNA synthesis was primed
with an oligo-dT primer containing a Not I site. Double
stranded cDNA was ligated to an EcoR I adaptor, digested
with Not I, and cloned directionally into pT773-Pac
vector. The oligonucleotide used to prime the synthesis of
first-strand cDNA contains a library tag sequence that is
located between the Not I site and the (dT18 tail. The
magnetic craft pelvis in the contains a library tag sequence that is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
;
               Contact: Robert Strausberg, Ph.D.

Email: cgapbs-remail.nih.gov
Tissue Procurement: Dr. Jose Mercuende
Tissue Procurement: Dr. Jose Mercuende
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Clone distribution information can be found
through the I.M.A.G.E. Consortium/LDNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1043 GATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCA 1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1163 CAGCTAGTGTTTTTTACCATCCGTCATTACCCAAAGACTTGGGAACTAAAATGTTCCCCA 1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTGATATGCTGATTTTCATTGTGCACATGGACTGAATCACATAGATTCTCCTCCGTCA 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803 TCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGACTACA 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      863 AAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGAGAGACT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTCAATAACT 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                484 GATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCA 425
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TAG_SEQ=ACACTTGCAC"
                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                   Location/Qualifiers
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Unpublished (1997)
                                                                                                                                                                                        Seq primer POLYA=Yes.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                             993 AAAAGACAGGGAGACAGTACTGTCATCTGCATTATAACGGACTGTGATGGGATCACATGA 1052
                                                                                                                                             1053 GCAAATTTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCACCTTCTCATC 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Email: Ggapbs-rémail.nlh.gov
Tissue Procurement: CLONTECH Laboratories, Inc.
CDNA Library Preparation: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Plate: LLCM1371 row: m column: 10
High quality sequence stop: 651.
High quality sequence stop: 651.
                                                                                                361 ATTTATGCTGGGCAGGGGAACGATTTCCAATGTGAAGACGTCAATAACTTTAATTTGCGA 420
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NIH *MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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BG482931.1 GI:13415210
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Best Local Si
Matches 516;
                                                                                                                                                                                                                                                                                                                                             DEFINITION
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BG482931
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Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genefics (www.resgen.com).
Seg primer: M13 Forward
POLYA-Yes.
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostom1;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 500)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                       Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
451 Ecstein Medical Research Building Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                 1066 TCTCAAAGGCAAAGGACACTCCTTTCTAATTGCATCACCTTCTCATCAGATTGAAAAAA 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1186 TCATTACCCAAAGACTTGGGAACTAAAATGTTCCCCAGGGTGATATGCTGATTTTCATTG 1245
                                                                         946 CAGTGGAACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAG 1005
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                                                                                                 241 TCTCAAAGGCAAAGGACACTCTTTCTAATTGCATCACTTCTCATCAGATG--AAAAA 298
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/db_xref="taxon:9606"
/clone="UI-E200-ahq-c-05-0-UI"
/clone_Lib="UI-E-E10"
/tissue_Lype="fetal eyes, lens, eye anterlor segment,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1126 AAAAAGCACTGAAAACCAATTACTGAAAAAAAATTGACAGCTAGTGTTTTTACCATCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UI-E-EJO-ahq-c-05-0-UI.S2 UI-E-EJO Homo sapiens CDNA Clone UI.E-EJO-ahq-c-05-0-UI 3', mRNA sequence.
BM676508.1 GI:18986404
EST.
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Concordar Contrology (TI phage resistant)"

//dev_stage="fetal and adult"
//deb_host="DH10B (Life Technologies) (TI phage resistant)"
//deb_host="Drgan: eye; Vector: pTT3-Pec (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not I;
UI = E.EJO is a subtracted cDNA library constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pTT3-Pac vector. The oligonuclectide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA; lens, CGATTAAGTG; retina, CGGG; Retina Foveal and Macular, GTCS; RPE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
                                                                                                                                                                                                                                                                                                                                                                                                            University of Iowa
451 Eckstein Medical Research Building Iowa City, IA 52242, USA
791: 319 335 8256
Fax: 319 335 9565
Email: msoares@blue.weeg.uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 507)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="fetal eyes, lens, eye anterior segment, optic nerve, retina, Retina Foveal and Macular, RPE and Choroid"
                                                                                                                                                                                                                   Bonaldo,M.F., Lennon,G. and Soares,M.B. Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genetics (www.resgen.com).
The following repetitive elements were found in this cDNA sequence: 443-498, >POLY_A#Simple_repeat
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 AAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCATAA
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/clone="UI-E-EJ0-ahq-c-05-0-UI"
/clone_lib="UI-E-EJ0"
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                            GI:19027149
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Contact: Soares, MB
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                                     Jacustone Liferal and adult"

/dev_stage="fetal and adult"
/lab_host="DH10B (Life Technologies) (Tl phage resistant)"
/note="Organ: eye; Vector: pTT3-pac (Fharmacia) with a modified polylinker: Site_1: ECOR I; Site_2: Not I;
UI-E-EJO is a subtracted cDNA library constructed according to Bonaldo. Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dy primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with an oligo-dy primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT773-pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAGA; lens, CGATTAGCGA; eye anterior segment, AATGCCGAT; optic nerve, CCATTAAGTG; retina, CGCG; Retina Foveal and Macular, GTC; RPE and Choroid, ACCTAA. This library was created for the program, Gene Discovery in the Visual and the Interpret of the program, Gene Discovery in the Visual
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optic nerve, retina, Retina Foveal and Macular, RPE and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674 AAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCA 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494 AGGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAAGACAAGTCTTCACATCTTGTTTTCA 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 794 GGATCGGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      854 CAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAG 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194 TCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTATAACGGA 135
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UI-E-EJO-ahq-c-05-0-UI.rl UI-E-EJO Homo sapiens cDNA clone
UI-E-EJO-ahq-c-05-0-UI 5', mRNA sequence.
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TAG_SEQ=AATGCCGCAT"
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E | Lobasa 1 to 906)

I | Lobasa 1 to 906)

I | Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys cDNA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Inc.

CONA Library Preparation: Life Technologies, Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11636 row: b column: 17

High quality sequence stop: 730.

Location/Qualifiers
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                                                                                                                                                                                                                                             977 ATAACTICATITGCGAAAAAGACAGGGAGACAGTACTGTCATCTGCATTATAACGGACTG 1036
                                                                                                                                                                                             1037 TGATGGGATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGGACACTCCTTTCTAATT 1096
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/strain="C57BL/64"
/db_c="taxon:10090"
/clone="IMAGE:521888"
/clone=lib="NCI_CGAP_Mam5"
/tissue=type="tumor, gross tissue"
/lab_host="DH10B"
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BE910803 580 bp mRNA linear EST 29-SEP-2000 601661855F1 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:3962292 5', mRNA sequence.
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Mus musculus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 580)

11 (hases 1 to 580)

Nath-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                        240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603 CCTCGGGGGTTGCCAGGCTTGCCAGGGTGCCAGGCATGCCTGGGCCTAAGGGACCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             243 CTACAAGGTCCTCCTGGCCCCAGAGGTCCAAAAGGTGACAGAGGATCTCAGGGACCACT
                                                                                                                                                                                                                                                   241 GCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAGGCGTGGCGGCAAAGGA
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                                                             1 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATT
                                                                                                                                                                                         CTACAAGGTCCACCGGGCCCCAGGGGTCCAAGAGGTGACAGAGGATCCCAGGGACCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCCCCAGTGGGGACCCCAGGCCCCCGGGCCCACCAGGCAAAGAGGGGACTCCCCGGGCCCT
                                Indels
                4.5e-84;
Score 462.6; D
Pred. No. 4.5e-
0; Mismatches
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   34.18;
81.78;
                                  Conservative
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841 AATTTTCCAAT 851
                1 Similarity
597; Conserv
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JOURNAL
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/organism="misculus"
//organism="misculus"
//clone_"IMAGE_570432"
//clone_"IMAGE_570432"
//clone_"IMAGE_570432"
//clone_"IMAGE_570432"
//dev_stage="whole brain"
//dev_stage="embryo 12.5dpc"
//dev_stage="embryo 13.5dpc"

                                     BQ771366 808 bp mRNA linear EST 26-JUL-2002
UI-M-FIO-byu-g-09-0-UI.rl NIH_BMAP_FIO Mus musculus cDNA clone
IMAGE:5702432 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Bmail: cgapbs-femial.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
This clone was contributed by the Brain Molecular Anatomy Project
(BMAP)
                                                                                                                                                                                                                                                           Euteleostomi;
Murinae; Mus.
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                         Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; E
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158 c 173 g
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BQ771366.1 GI:21979842
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RESULT 12
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                        BQ771366
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             Email: capbs remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can b
found through the I.M.A.G.E. Consortium/LLNL at:
http://imaqe.llnl.gov
Plate: LLAM9128 row: m column: 13
High quality sequence stop: 580.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                            /clone_lib="NCICGAP_Mam1"
/tissue_type="tumor, blopsy sample"
/dev_stage="10 months, virgin"
/lab_host="DH10B"
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Contact: Robert Strausberg, Ph.D.
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/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                 /db_xref="taxon:10090"
/clone="IMAGE:3962292"
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AL543000
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Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
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BP 191 91006 EVRY cedex - France
Email: seqrefégenoscope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
                                                                241 ACAGGAAAGCGAATGGAAGTGGAGTGGCTAGGTACCTGTTGATTACAAAAACTGGAAAGC
                                                                                                                                  TGGACAGCCGGATAACTGGGGTCATGGCCCATGGGCCAGGAGAAGACTGTGCTGGGTTGAT
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                                                 GCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGACTACAAAATTGGAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9666"
/clone="cS0bE0134708"
/clone_11b="LTL_FL002_PL1"
/lab_host="DH10B"
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Mus musculus
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 601)
1 (bases 1 to 601)
1 (haryes, Ortp://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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Email: cgapbs-r@mail.nih.gov

Email: cgapbs-r@mail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGA
                                                                                                                                                Length 517;
                                                                                                                                                DB 9;
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Arkawa, T. Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Isohi, T., Itohi, T., Itohi, J., Kawai, J., Konno, H., Kouda, M., Kayai, J., Konno, H., Kouda, M., Kayai, J., Konno, H., Kouda, M., Koyai, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Okazaki, Y., Okido, T., Saito, R., Sakai, C., Sakai, K., Sano, H., Sasaki, J., Shibata, K., Shinaqawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takabashi, F., Takeda, Y., Tanaka, T., Toya, T., Muramatsu, M. and Hayashizaki, Y. RIKBN Mouse ESTS (Arakawa, T., et al. 2001)

On Jul 6, 2000 this sequence version replaced gi:8940810.

Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000) (2000). Toth, M., Carninci, P., Sugahara, Y. and Hayashizaki, Y. Computer based methods for the mouse full-length CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: genome-reségsc.riken.go.jp,
URL:http://genome-reségsc.riken.go.jp/
Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,
M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp/) for
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="cerebellum"
/dev_stage="7 days neonate"
/lab_host="DH108"
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/organism="Mus musculus"
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                                                                                                  REFERENCE
                                                                                                                            AUTHORS
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musculus cDNA clone A730023E20 3', mRNA sequence.
                                                                                                                                                                                                                                                                                             /note-"Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sal1; Stle_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   256 CCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAG 315
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/tissue_type="tumor, gross tissue"
/dev_stage="7 months"
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                                                                                                                    /strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:3484163"
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Location/Qualifiers
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Best Local Similarity 80.4%;
Matches 513; Conservative
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SUMMARIES

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March 21, 2003, 02:20:06; Search time 286.911 Seconds (without alignments) 4293.470 Million cell updates/sec
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- nucleic search, using frame_plus_p2n model
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Post-processing: Minimum Match 0%
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ALIGNMENTS

RESULT 1

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The invention relates to polynucleotides encoding a new collectin of human origin. The collectin can be used as an antibacterial and antiviral agent and for screening potential drug molecules. The new collectin can be produced by standard recombinant methodology. The present sequence
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The invention relates to a human scavenger receptor-like protein. The protein is useful as a target molecule for diagnosis, prevention and treatment of autoimmune diseases such as rheumatoid arthritis.
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arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
low density lipoprotein; ss.
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                                                        GlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGlu
                                                                                                                 GlyProProGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGlu
        1459 GGACCACCTGGCCCTGCGGGTGAGAGGCCCCAATTGGACCAGCTGGTCCCCCCGGAGAG
                                     GluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLys
                                                                                                                                                                                                                                             LysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsn
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                                                                                                                                               ProLysGlyProProGlyProProGlyProSerGlyAlaValValProLeuAlaLeuGln
                                                                                                                                                                            {\tt AsnGluProThrProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThr}
                                                                                                                                                                                                        421 AspLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCys
                                                                                                                                                                                                                1879 GACAAATGCTACTATTTTTCAGTTGAGAAAGAAATTTTGAGGATGCAAAGCTTTTCTGT
                                                                                                                                                                                                                                                                                1999 AAACAGAIGGIAGGGAGAGAGAGCCACIGGAICGGCCICACAGACICAGAGCGIGAAAAI
                                                                                                                                                                                                                                                                                              GluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnPro
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The present sequence encodes a human scavenger receptor, designated STGL-P1. The STGL-P1 bolypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of exidized low density
                                                                                                                                                                                                                                                                                                                                                                                              yer receptor proteins SRCL-P1 with collectin-like structure, treatment and diagnosis of diseases associated with oxidized
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                                                                                                                                                                                                                                                                                                                                                                                                                                   low-density lipoprotein accumulation
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Query Match:
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10-OCT-2000;
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral socierosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
                             2219 CAGTGGAACGATTTCCAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAG 2278
                                                                                                                                                                                                                                                                                                                                                                                               Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CMS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosls; Shy-Drager Syndrome; chemotactic; chemokactic; thrombolytic; drug screening; arthritis; inflammation;
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2099 GAATGGAAGTGGCTGGATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCG 2158
                                                                                                521 GlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCysGluLysAspArqGlu 540
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Yang Y,
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Xu C, Xue AJ,
R, Drmanac RT;
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                                                                                                                                                                                                                                                                                                                                                                    Human polynucleotide SEQ ID NO 4617.
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Wang Z, Wehrman T, Xt
Zhou P, Goodrich R,
                                                                                                                                                                 541 ThrValLeuSerSerAlaLeu 547
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25-ARR-2000; 2000US-0552317.
09-JUL-2000; 2000US-0598042.
19-JUL-2000; 2000US-0653450.
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19-OCT-2000; 2000US-0693036.
29-NOV-2000; 2000US-0727344.
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P-PSDB; AAM41472.
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Wang J, W
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LysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGlu
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                                                                                                                                                                                                                                                          Isolated polynucleotide encoding extracellular matrix or adhesion-associated protein (EXMAD) useful for diagnosing, tre preventing disociated associated with expression of EXMAD such proliferative, immune and genetic disorders
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P-PSDB; AAB27236.
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Query Match:
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                                                                                                                                                                                                                                                                          Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosls; Shy-brager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
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           AspAsnTrpGlyHisGlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGly
                                   GATAACTGGGGTCATGGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGG
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Zhang J;
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Yang Y,
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Wang Z, Wehrman T, Xu C, Xue AJ,
Zhou P, Goodrich R, Drmanac RT;
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2000US-0552317.
2000US-0598042.
2000US-0620312.
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03-AUG-2000; 2000US-0653450.
14-SEP-2000; 2000US-0662191.
19-OCT-2000; 2000US-063036.
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P-PSDB; AAM39686.
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09-JUL-2000; 2
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                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
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assays for receptor activity, arthritis and inflammation, leukaemias C.N.S disorders.
Note: The sequence data for this patent did not form part of the prin
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  antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian; neuroprotective; nootropic; osteopathic; haemostatic; vasotropic; antiuloer; inngilotide; antidlabetic; antisasthmatic; antiallargic; immunostimulant; antiparastiic; secreted protein; transmembrane protein; cytokine; cell proliferation; cell differentiation; autoimmune disease; stem cell; growth factor; nervous system disease; neuropathy;
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                                              nAsnGluProThrProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheTh
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oGlyProProGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGl
                                     uArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGl
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The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (CDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to analogenesis, cytokine, cell proliferation, call differentiation, antinflammatory, stem cell growth factor activity and activin or inhibin-related activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or rese to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzahmer's, Parkinson's disease, amyctrophic central and peripheral nervous system diseases and neuropathies, such as Alzahmer's, Parkinson's disease, amyctrophic activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopaenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degeneration disorders or periodontal disease. (I) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune disorders and conditions, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis, accombinant protein, as markers for tissues in which the corresponding protein is preferentially present the corresponding the present 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autolmmune diseases, bone disorders and lung or liver fibrosis
Alzheimer's disease; Parkinson's disease; Huntington's disease; osteoporosis; severe combined immunodeficiency; SCID; infection; multiple sclerosis; rheumatoid arthritis; gene therapy; gene; ss.
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Spaulding V;
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MERBERG D.
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activin/inhibin; chemokinesis; haemostasis; thrombolysis;
receptor/ligand activity; anti-inflammatory; tumour inhibitor;
cadherin/tumour invasion suppressor; ds.
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Mismatches:
Indels:
Gaps:
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This DNA sequence was isolated from a human adult brain cDNA

This DNA sequence was isolated from a human adult brain cDNA

This DNA sequence was isolated from a human adult brain cDNA

This DNA and proteins

Strain and proteins

Strain and proteins

Strain and proteins

Continues include nutritional sources or supplements, immune activity, tissue growth activity, haematopoiesis regulating activity, tissue growth activity, anti-inflammatory activity, conferin/tumour invasion suppressor activity, anti-inflammatory activity, and tumour inhibition activity. The DNAs are also stated to be useful for gene therapy. A host cell transfected with the DNA, or its subfragments and variants is useful for recombinant production of the human secreted protein clones.
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retina, adult placenta or adult uterus c
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arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
low density lipoprotein; ss.
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Mismatches:
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G; 556
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635
829 A; 617 C;
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                                8.44e-89
2765.00
96.71%
91.77%
 BP;
                                                    Similarity:
                     Aliqnment Scores:
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The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac
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Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J, Paoni NF;
Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal
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                                               25-JUL-2000; 2000US-220654P.
28-JUL-2000; 2000US-220664P.
28-JUL-2000; 2000US-220664P.
28-JUL-2000; 2000US-220664P.
27-AUG-2000; 2000US-0643657.
23-AUG-2000; 2000WO-US23328.
24-AUG-2000; 2000WO-US23328.
24-AUG-2000; 2000US-0664610.
18-SEP-2000; 2000US-0664610.
18-SEP-2000; 2000US-0665350.
24-AUG-2000; 2000US-0709238.
01-DEC-2000; 2000US-0709238.
01-DEC-2000; 2000WO-US30952.
01-DEC-2000; 2000WO-US30952.
01-MAR-2001; 2001US-076666.
09-MAR-2001; 2001US-086689.
25-MAR-2001; 2001US-0866028.
26-UN-2001; 2001WO-US17860.
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GODDARD A.
GODDARKI P J.
GUNNEY A L.
HILLAN K J.
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PAONI N F.
STEPHAN J F.
WATANABE C K
WILLIAMS P M
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FERRARA N.
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     Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer; atherosclerosis; cardiac hypertrophy; gene therapy; endothelial disorder; cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; gene; ss.
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GluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGluGlnTrpIleLys
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                                                                   LysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGlu
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arthritis,
        atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritiangular myocardal infarctions, thrombophebitis, lymphangitis, tumour anglogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention.
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age-related macular degeneration,
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 cancer,
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Human; angiogenesis; cardiant; cytostatic; antianglogenic; hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardidovascular disorder; andothelial disorder; cancer; angiogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; hymbuadicid arthritis; myocardial infarction; thromopophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; gene; ss.
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ABB85003. The PRO proteins and polynucleotides have cardiant, cytostatic,
antianglogenic, hypotensive, vulnerary and antiarteriosclerotic
activities, and can be used in gene therapy. The PRO polynucleotides,
proteins, agonists and antagonists are useful for treating or diagnosing
a cardiovascular, endothelial or angiogenic disorder in a mammal,
e.g. cardiac hypertrophy, trauma, cancer, age-related macular
degeneration, atherosclerosis, hypertension, arterial restenosis,
rheumatoid arthritis, angina, myocardial infarctions, thrombophlebitis,
lymphangitis, tunour angiogenesis (such as breast carcinoma and liver
carcinoma) and wound healing. The PRO polynucleotides have applications
in molecular biology, including use as hybridisation probes, and in
chromosome and gene mapping. ABL88259 to ABL88267 represent primers and
probes used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NF
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2001US-0796498.
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2001WO-US0665.
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30-MAY-2001; 01-JUN-2001;

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The present sequence encodes a human scavenger receptor, designated SRCL-Pl. The SRCL-Pl polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into calls.
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PGR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags of orientifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantifiating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in capposition for generatic disorders or other trails to assess biodiversity and to produce other types of data and products dependent on DNA and diagnostic coding sequences of the invention.

Camino acid sequences AAS64197-AAS94564 represent novel human but was obtained in electronic format directly from WIPO specification.
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food supplement; medical imaging; diagnostic; genetic disorder;
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Best Local Similarity:
Query Match:
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23-AUG-2000;
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98WO-JP03602

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ProProGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGluArg
       GlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLys
                                                    ProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGluGly
                                                                                    TrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAsp
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This sequence encodes the human cellular stress response 3 (CSR3) protein of the invention. The CSR proteins are macrophage scavenger receptor proteins. The CSR proteins can be used in the treatment, gene therapy and diagnosis of diseases in which intracellular stress is important, such as arteriosclerosis, diabetic circulatory obstruction, and microbial infection. Expression of the proteins is induced in vivo in response to intracellular stress, and inhibits cell death as a result of such stress.
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Matches:
Conservative:
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98JP-0230121
97JP-0233396
                                                                          (NISB ) JAPAN TOBACCO INC
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Best Local Similarity:
Query Match:
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Tokino T;

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Nakamura Y,
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1525 CCCGGCCCTCCAGGACCAAGAGGATTCAAAGGAGATATGGGCGTGAAAGGGCCTGTTGGC 1584
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                                                                                                                                               AsnLysGlyGlnLysGlyGlu-----Lys 277
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                                                                                                                                                                                                                                                                          GlyLysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThr 357
                                  CTGAACAAGTCTCTCCATCATCTGGGCACCACACACAGCCTGCTCCGGGAGCGCTTCAGC
                                                              LysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyPro
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                      LeuAsnAsnThrLeuAlaAsnIleArgLeuAspSerValSerLeuArgMetGlnGlnAsp
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13-AUG-1997;
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This sequence encodes the human cellular stress response 1 (CSR1) protein of the invention. The CSR proteins are macrophage scavenger receptor proteins. The CSR proteins can be used in the treatment, gene therapy and diagnosis of diseases in which intracellular stress is important, such as arteriosclerosis, diabetic circulatory obstruction, and microbial infection. Expression of the proteins is induced in vivo in response to intracellular stress, and inhibits cell death as a result of such stress.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31 SerValAspAspThrSerGlnAlaIleGlnArgIleLysAsnAspPheGlnAsnLeuGln
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154
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134
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Matches:
Conservative:
Mismatches:
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                                                                                                                                                              Claim 4; Page 119-127; 175pp; Japanese.
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                                                                                Scavenger receptor proteins, for fisorders involving cell stress
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60.41%
39.59%
WPI; 1999-181032/15
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                            P-PSDB; AAY00992
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3810
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1530 CTGCTCAGTGCCCGGCTGGACCTCAACGTCCGGAACCTCCTCCATGATCGTGGAGGAGATG 1589
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|830 CCAGGCCTCAAAGGCCACTTTGGAACTGGAGGGCCGAGA------ 1877
                                                                                                                                  298 ProGlyGluArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGly 317
                                                            270 AsnLysGlyGlu-----Lys 277
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Search completed: March 21, 2003, 08:37:40 Job time : 318.244 secs

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Sequence 40, Appl
Sequence 264, Appl
Sequence 1, Appli
Sequence 3, Appli
Sequence 9, Appli
Sequence 3, Appli
Sequence 6, Appli
Sequence 66, Appli
Sequence 137, Appli
Sequence 116, Appli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SECUENCES: 135
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER REPARABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: FLEER, HOHBACH, TEST, ALBRITTON & STREET: 4 Embarcadero Center, Suite 3400 CITY: San Francisco CTATE: California COUNTRY: USA
US-09-167-364-1

US-09-449-897-1

US-09-449-897-1

US-09-029-348-20

US-08-794-795-5

US-08-494-168-1

US-09-453-7028-62

US-09-453-7028-62

US-09-453-7028-62

US-09-453-7028-62

US-08-392-3678-1

US-08-392-3678-1

US-08-392-3678-1

US-08-392-3678-1

US-08-392-3678-1

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US-08-999-336-1

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US-08-999-336-1

US-08-999-336-1

US-08-999-336-1

US-08-999-336-1

US-08-999-336-1

US-09-111-470-9

US-09-453-7028-94

US-09-453-7028-94

US-09-453-7028-116

US-09-553-521-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, BETTEAM I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A5555
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8770
TELEFAX: (415) 494-8771
TELEFAX: 910 27299 FHT UR
INFORMATION FOR SEC ID NO: 60:
SEQUENCE CHARACTERISTICS:
    ZIP: 94111-4187
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US-08-642-255-60
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2886.622 Million cell updates/sec
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                                                                                                                                                              March 21, 2003, 08:26:21; Search time 58.1137 Seconds
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/cgn2_6/ptodata/1/ina/5B_COMB.seg:*
/cgn2_6/ptodata/1/ina/6A_COMB.seg:*
/cgn2_6/ptodata/1/ina/6B_COMB.seg:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seg:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seg:*
                          5.1.4_p5_4578
Compugen Ltd.
                                                                                                                    nucleic search, using frame_plus_p2n model
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US-08-655-086-1
US-08-62-255-50
US-09-029-348-19
US-09-0297-269-39
US-09-073-663-11
US-09-073-663-11
US-08-642-255-48
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US-07-621-091G-1
US-08-399-889-1
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                          version 5
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Maximum Match 100%
Listing first 45 summaries
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Xgapop 10.0, Xgapext
Ygapop 10.0, Ygapext
Fgapop 6.0, Fgapext
Delop 6.0, Delext
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Maximum DB seq length: 200000000
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2969
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Match Length
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                                                                                                                                            810
93
8
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23
                                                                                                                                                                        Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                US-09-763-712A-2 (1-547) x US-08-642-255-60 (1-810)
                                                                                                                                                             Matches:
                                                                                                                                              Length:
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333 EARLE OVINGTON BOULEVARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              406 -----AlaProGluAspAsnGlyCysPro 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           592 CCTGGTGCTCCGGGACCTGCAGGCCCACCG 621
                                                                   MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "synthetic"
US-08-642-255-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1, Application US/08655086 Patent No. 5821089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: GRUSKIN, ELLIOTT A
APPLICANT: BUECHTER, DOUGLAS
APPLICANT: ZHANG, GUANGHUI
APPLICANT: CONNOLLY, KEVIN
NUMBER OF SEQUENCES: 5
TYPE: nucleic acid
STRANDEDNESS: double
FOPOLOGY: linear
                                                                                                                                            6.52e-18
459.50
53.16%
48.95%
15.48%
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CORRESPONDENCE ADDRESS:
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                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
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                                                                                                                               Alignment Scores:
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STATE:
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                                                                        Version #1.25
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Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
                                                                                                    APPLICATION NUMBER: US/08/655,086 FILING DATE: 03-JUN-1996 CLASSIFICATION: 435
                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN RELEASE #1.0,
CURRENT APPLICATION DATA:
                                                                                                                 FILING DATE: 03-JUN-1996
CLASSIFICATION: 435
ATORNEY/AGENT INRORMATION:
NAME: STEEN, JEFFREY S.
REGISTRATION NUMBER: 32,063
TELECOMMUNICATION INFORMATION:
TELEPHONE: 516-228-8484
TELEPHONE: 516-228-8516
                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 1: SEQUENCE CHARACTERISTICS: LENGTH: 3181 base pairs TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                        6.82e-17
452.50
52.11%
46.48%
15.24%
ZIP: 11553
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: unknown
                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
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400 CCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCCTGGACCGGCTGGTCCACCG 459
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                                                                                                                                                                   295 AlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGly 314
                   255 ProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLys 274
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                                                      GCGCCTGGACCGGCTGGTCCACCGGGTGCTCCGGGACCTGCAGGCCCCGCCAGGTGCGCCT
                                                                                                                 340 GCTGGTCCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGACCGGCTGGT
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Mismatches:
Indels:
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APPLICANT: THE VICTORIA UNIVERSITY OF MANCHESTER
TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: 4087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
NUMBER OF SEQ. ID NOS: 20
SOFTWARE: PATENTIN VET. 2.0
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Matches:
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436.50
47.06%
40.00%
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OTHER INFORMATION:
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Best Local Similarity:
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US-09-029-348-19
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                                                                                                                                                                                                                                        APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT
STREET: A Embarcadero Center, Suite 3400
CITY: San Francisco
STRATE: California
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOSTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,255
                                                                                               Conservative:
Mismatches:
Indels:
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Matches:
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DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                 Sequence 50, Application US/08642255
Patent No. 5773249
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: 20,015
REFERENCE/DOCKET NUMBER: 36555
TELECOMMUNICATION INFORMATION:
TELEPAX: (415) 494-8771
TELEFAX: (415) 494-8771
TELERX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.46e-17
448.50
52.70%
44.59%
15.11%
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TYPE: nucleic acid
STRANDEDNESS: double
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Query Match:
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MOLECULE TYPE:
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393
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			 ; US-08 Aliqn	Pred. Score Perce Best	Query DB: US-09	Qy Db	oy Og	Oy da	3 8 8	3 6 :	δ	g Vo	qa	δ Q	οy	qq	οy	qα	οy	q	ΟŊ
CACA 177	285 IGCT 237	OAla 295			yGlu 360       AGAG 537		olys 382   														
		6 CAGTATGATGGAAAAGGAGTTGGACTTGGCCCTTGGACTAAAGGACTTAAAAAGAACTTTGGACTTTGGACTAAATGGACTTTGGACTAAATGGACTTTGGACTAAATGGACTTTAAAAAGAAATGGACTTTGGACTAAATGGACTTTAAAAAAAA									SULT 5 -08-159-784-1	PPIICALION 43783 RMATION:	AFPLICANT: BJOIN K. OISEN TITLE OF INVENTION: NOVEL COLLAGEN AND USES THEREOF NUMBER OF SEQUENCES: 9	CORRESPONDENCE ADDRESS: ADDRESSEE: Fish & Richardson STREET: 225 Franklin Street	CIIT: BOSton STATE: Massachusetts COUNTRY: 11 S A	IP 02110-2804 IP 02110-2804	MEDIUM TYPE: 3.5" Diskette, 1.44 Mb COMPUTER: IBM PS/2 Model 502 or 558X	PERATING SYSTEM: MS-DOS (Version 5.0)	CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/159,784	FILING DATE: December 1, 1993 CLASSIFICATION: 530	PRIOR APPLICATION DATA:
Db 118	Qy 275 Db 178	Oy 286	Qy 316 Db 358	Qy 328 Db 418	Oy 341 Db 478	Qy 361 Db 538	Qy 372 Db 598	Qy 383 Db 658			RESULT 5 US-08-15	; Patent; GENER	TIT			S S S	) )		; CUF	·· ··	; PRI

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1087 CCTGGTGAAGATGGGAGACCGGTGACACTGGACCTCAAGGCTTTCCAGGGACCCCAGGA 1146
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       368 ------319MetProGlyLeuProGlyValProGlyMetPro 379
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     329 GlyAspProGlyProProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyPro 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                349 ProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGlyProArg--- 367
                                                                                                                                                                                                                                                                                                                                                                                                                       231 LeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyProPro
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Matches:
Conservative:
Mismatches:
Indels:
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ATTORNEY/AGENT INFORMATION:
NAME: John F. Freeman
REGISTRATION NUMBER: 99,066
REFERENCE/DOCKET NUMBER: 00246/170001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285 ProAlaGlyGluArgGlyProIle------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    251 GlyProArgGlyPro------
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                                                                                                                                                                                                                                                                       1.99e-15
428.00
46.41%
40.08%
                                                                                                             TELEX: 200154
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                        ent Similarity:
  Local Similarity:
                                                                                                                                                                                                                                                           nment Scores:
                                                                                                                                                                                                                            8-159-784-1
                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                       y Match:
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11yPro	SOFTWARE: PATEDALIA SOFTWARE: PATEDALIA GURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/555,669 FILING DATE: 13 NOV-1995 CLASSIFICATION: 435 ATTORNEY/AGENT INFORMATION: NAME: Halluin, Albert P. REFERENCE/DOCKET UNBER: 25,227 REFERENCE/DOCKET UNBER: 25,227 FREFERENCE/DOCKET 10N NUMBER: 25,227 FREFERENCE/DOCKET 415-854-360 TELECOMUNICATION INFORMATION: TELECOMUNICATION INFORMATION: TELECOMUNICATION 10N 100 11: SEQUENCE CHARACTERISTICS: LENGTH: 2543 base pairs TYPE: nucleic acid
The control of the	Qy 289 ArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGly 308   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   1111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111   11111

	ie-15 Length: 2543 00 Matches: 121 09 Conservative: 26 10\$ Mismatches: 91 11\$ Gaps: 9	/8-08-555-669-11 (1-2543)	ValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyProProGly 251  -::	103	ProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLys 271   :::	GlyGluProGlyProProGlyProAlaGlyGluArgGlyPro 291	:::::     GARAACGGGGCAGAGCTGGGAGCTGAGGCCGGCCCTCTGGAGAGCCAGGCGTC	IleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySer 309 	CCTGGGGAGCGCGGTGAGGCTGGCCACCGGGGCTCAGCGGGG 1210	Glucini 313	GCCTCGGCCCACAAGGCCCTCCCGGAGCCCCTGGTGTCCGAGGCTTCCAGGGCCAGAAG 1270	GlySerArgGlySerProGlyLysProGlyProGlnGlyProSerGlyAspProGlyPro 333 	ProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGly 353		Glu 360	CTTCCTGGGGATAAAGGAGAACTGGGTCCCAGCGGCCTGGTCGGACCCAAAGGAGGTCT 1450	098 300	GGCAGTCGAGGGGGGCTGGGCCCCCAAAGGCACCCAGGGTCCCCAACGGCACCAGCGGTGTT 1510	ProGlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGly 377	CCCGGTCCTCTGGGCCTGCAGGGCGTCCCGGGTGTTCCTGGC 1570	378	iii atcacggggaagccgggagttccggggaaggaggccagcgagcagcgcatcagggagctg 1630	378	TGTGGGGGGATGATCAGCGAACAAATTGCACAGTTAGCCGGGGACCTTAGGAAGCCTTTG 1690	ProGlyProLysGlyProProGlyProSer 391	GCACCCGGGTCCATTGGTCGGCCCGGTCCAGCTGGCCCCCTGGGCCCCCCAGGACCCCCA 1750	GlyAlaval-valProLeuAlaLeuGlnAsnGluPro	
STRANDEDNESS: unknown TOPOLGGY: unknown MOLECULE TYPE: CDNA FEATURE: NAME/KEY: CDS LOCATION: 472098	Alignment Scores: Pred. No.: Score: Score: Score: Al9.00 Percent Similarity: Best Local Similarity: 29.30% Query Match: 14.11% BB:	-712A-2 (1-547) x US-08	ValAspSerLysHisGlyGlnLe::::    ::::		ProargGlyProargGlyAspar :::       GAGAAGGCCCCAACGGGCTGCC	GlyGlnLysGlyGluLysGlyGl	::::::     GGAGAACGGGGCAGAGCTGGGGA	IleGlyProAlaGlyProProGl	CCTGGAGATGCTGGCATGCCTGG		GCCCTCGGCCCACAAGGCCCTCC	GlySerArgGlySerProGlyLy          GGCAGCATGGGACCCCGGCCT	ProGlyProProGlyLysGluGl	CGGGGTCCGGGAGGTGCCGAAGG	LeuGlnGlyThrValGlyGlu	CTTCCTGGGGATAAAGGAGAACT		GGCAGTCGAGGGGAGCTGGGCCC	ProGlyValProGl	CAGGGTGTCCCCGGGCCCCCCGG	Met	ATCACGGGGAAGCCGGGAGTTCC		TGTGGGGGATGATCAGCGAACA	Id	GCACCCGGGTCCATTGGTCGGCC	GlyAlaVal-ValProLeuAlaL	GGCTCCATTGGTCACCCTGGCGC
MO FE 08-5	gnment d. No. ore: cent S it Loca	-763	232	) )	252 1031	272	1091	292	1151	310	1211	314	334	1331	354	1391	360	1451	361	1511	378	1571	378	1631	379	1691	392	1751
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1972 GCCTCCCGGAGATCCTGGGCTTCCAGGTGCCATTGGGGCCCCAGGGGACACCGGGGGATCTG 2031
404 -----ThrProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 421
                                                                                     421 pLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGl 441
                                                                                                                                                                                                                                                               461 sGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGl 481
                                                                                                                                                                          441 uAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLysLy 461
                                                                                                                                                                                                     481 uTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAs
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US-09-073-663-11
; Sequence 11. Application US/09073663
; Patent No. 6127523
; GENERAL INFORMATION:
; APPLICANT: Brewton, Richard G.
; APPLICANT: Mayne, Richard
; TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MGGregor & Adler, LLP
; STREET: 8011 Candle Lane
; STREET: Texas
; COUNTRY: USA
; IPS
                                                                                                                                1833 -----GAAACCAGGGTGACAGAGGACAAAG-
                                                                                                                                                                                                                                                                                                                                                                                                                                           501 pAsnTrpGlyHisGlyHisGlyProGly------
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CLASSIFICATION:
ATTOREX/AGENT INFORMATION:
NAME: Benjamin Aaron Adler, Ph.D., J.D.
REGISTRATION NUMBER: 35,423
REFERENCE/DOCKET NUMBER: D5913D
TELECHONE: (713) 777-2321
TELEPHONE: (713) 777-6908
TELEFAX: (713) 777-6908
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
COMPUTER: Apple Macintosh
SOFTWARE: Microsoft WORD for Macintosh
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/073,663
                           1811 CTGGGAGACCCCGGGCCCAGAG-----1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 2543 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ) NAME/KEY: CDS
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Alignment Scores: 3.85e-15 Length: 2543 Pred. No.: 419.00 Marches: 121 Score: 35.59% Conservative: 26 Best Local Similarity: 29.30% Mismatches: 91 Query Match: 3 Gaps: 9	US-09-763-712A-2 (1-547) x US-09-073-663-11 (1-2543)  QY 232 ValAspSerLysHisGlyGlnLeulleLysAsnPheThr1leLeuGlnGlyProProGly 251	252 ProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLys 1031 GAAAGGCCCCAAACGCCAACCAACGCAACAAAAAAAAAA	272 GlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGlyPro	Qy       292 IleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySer 309         III       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Qy 310GinglyProLys 313  bb 1211 GCCTCGGCCCACAAGGCCCTCCGGAGCCCTGGTGTCCGAGGCTTCCAGGGCCAGAAG 1270	Qy       314 GlyserArgGlySerProGlyProGlyProGlnGlyProSerGlyAspProGlyPro       333         IIIIII       IIIIII       IIIIII       III       III	Qy 334 ProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGly 353	Qy 354 LeuGinGlythrVaiGlyGlu	ОЭВ 360	1451 GGCAGTCGAGGGAGCTGGGCCCCAAAGGCACCCAAGGGTCCCAACGGCACCAGCGGTGTT	<pre>Qy 361ProGlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGly 377   </pre>	Qy         378 Met	Оу 378 378	Db 1631 TGTGGGGGGATGATCAGCGAACAAATTGCACAGTTAGCCGCGCGCACCTAAGGAAGCCTTTG 1690	Oy 379	Qy 392 GiyalaVal-ValProLeuAlaLeuGlnAsnGluPro	Qy 404ThrProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 421	Oy 421 pLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGl 441

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STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    343 GETCCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCCCCATGGCCCAGCAGGACCG 402
                                                                    69
                                                                                                                                                                  288 GluargGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLys
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                                  248 GlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyPro
                                                                                                   268 ThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGly
                                                                                                                                                                                                                                          308 GlySerGlnGlyProLysGlySerArgGlySerProGlyLysProGlnGlyPro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4, Application US/08159784
Patent No. 5643783
GENERAL INFORMATION:
APPLICANT: Bjorn R. Olsen
TITLE OF INVENTION: NOVEL COLLAGEN AND USES THEREOF NUMBER OF SEQUENCES: 9
US-09-763-712A-2 (1-547) x US-08-642-255-48 (1-432)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STATE: Massachusetts
COUNTRY: U.S.A.
2IP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 555X
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION NUMBER: US/08/159,784
FILING DATE: December 1, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ALICANALIA SONDO E. Freeman NAME: John F. Freeman REGISTRATION NUMBER: 29,066
REFERENCE/DOCKET NUMBER: 00246/170001
TELECOMMUNICATION INFORMATION: TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388 ProGlyProSerGlyAlaValValPro 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            403 AAAGGAGCTCACGGTCCGGCAGGTCCG 429
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 530 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 3394
TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Boston
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CITY: BC
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946 CCTCAGGGACCCCCCGGCATC---GGCTACGAGGGCGCCCAGGGCCCTCCCGGCCCCCA 1002
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706 GGCCCCCCGGACCACCAGGGCAGTTTCGTTTGACTTTCTTCAGAAGGAGGCTGAAATG 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
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                                                                                                                                                                                                       261
                                                                                                                                                                                                                                         612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   345 ProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValPro 364
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                                                                                                                                                                                                                                                                                             613 AGCAATGTGTTTGCTGAGTCCAGCCGCCCGGGCCTCCAGGATTGCCAGGAATGAG---
                                                                                                                                                                                                                                                                                                                                             273 GlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGlyProIle
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246 Church Street
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Patent No. 5424408
GENERAL INFORMATION:
APPLICANT: Reeders, Stephen T., Morrison, Karen E.,
APPLICANT: G.
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen
TITLE OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
                                                                                Conservative:
Mismatches:
Indels:
                                                                                                                                                                     US-09-763-712A-2 (1-547) x US-08-159-784-4 (1-3394)
                                                                  Matches:
                                                    Length:
                                            1.87e-14
409.00
48.98%
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13.78%
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                                                                                                    Best Local Similarity:
Query Match:
                                                                                  Percent Similarity:
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                                  Alignment Scores:
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US-08-159-784-4
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                                                                                    364 ProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGly
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APPLICANT: Redefies, Karen E
APPLICANT: Hudson, Karen E
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REPERENCE: 951263A
FILE REPERENCE: 951263A
CURRENT APPLICATION NUMBER: US/08/399, 889B
CURRENT APPLICATION NUMBER: 07/621091
EARLIER APPLICATION NUMBER: 07/621091
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PATENTIN OF 2:0
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Conservative:
Mismatches:
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Best Local Similarity:
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LENGTH: 1416
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103
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PRIOR APPLICATION 1424
PRIOR APPLICATION DATA: No. 5424408 applicable
ATTORNEY/AGENT INFORMATION:
NAME: Barth, Richard S.
REGISTRATION NUMBER: 28180
REGISTRATION NUMBER: 900983/RB
TELECOMOUNICATION INFORMATION:
TELEPHONE: (212) 972-1400
TELEPHONE: (212) 972-1400
TELEPHONE: (212) 370-1622
TELEPHONE: 1230-1622
TELEPHONE: 1416 base pairs
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1416 base pairs
TYPE: Nucleic acid
STRANDEDNESS: Double
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Matches:
Conservative:
Mismatches:
Indels:
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PUBLICATION INFORMATION: No. 5424408e
US-07-621-091G-1
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POSITION IN GENOME: NO. 5424408 known
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh OS7.0
SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/621,091G
FILING DATE: 11/30/90
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MOLECULE TYPE: CDNA tO MRNA
HYPOTHETICAL: NO
ANTI-SENSE: NO
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LIBRARY: Bovine lens CDNA
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STRAIN: Unknown
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Best Local Similarity:
Query Match:
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172 CCTCCAGGGAGTCCTGTAGAAGGCATAAAAGGAGACAAGGGGTTGATGGGAGAGCCTGGC 231
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412 CCAAAAGGACCACCTGGAGTACGTGGAGGGCCTGGCACAGTGAAGATCATCTCCCTTCCA
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Patent No. 6007980

GENERAL INFORMATION

APPLICANT: Reders, Stephen T

APPLICANT: Hudson, Karen E

APPLICANT: Hudson, Billy G

TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides

FILE REFERENCE: 951263B

CURRENT APPLICATION NUMBER: US/09/167,364

CURRENT APPLICATION NUMBER: 08/399889

EARLIER APPLICATION NUMBER: 08/399889

EARLIER PILING DATE: 1995-03-07

NUMBER OF SEQ ID NOS: 25

SOFTWARE: Patentin Ver. 2.0
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LOCATION: (1)..(1416)
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Mismatches:
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        1.69e-14
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Best Local Similarity:
Alignment Scores:
Pred. No.:
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US-09-439-897-1
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460 LysLysGlnMetValGlyArgGlu-
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US-09-484-970B-4
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APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REPERENCE: 95-1263-C
CURRENT APPLICATION HUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1
LENGTH: 1416
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US-09-439-897-1
                                                                                                                                    TYPE: DNA ORGANISM: Bos taurus
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Best Local Similarity:
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LOCATION: (1)
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                 246 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArg-----
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                                                                                                                                                                                                         APPLICANT: Jones, Karen A.
APPLICANT: Volkmuth, Wayne
APPLICANT: Walker: Michael G.
TITLE OF INVENTION: BONE REMODELING GENES
FILE REFERENCE: PB-0014 US
CURRENT APPLICATION NUMBER: US/09/484,970B
UNMBER OF SEQ ID NOS: 172
                                                                                                                                                           Sequence 4, Application US/09484970B Patent No. 6426186 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.21e-14
400.50
54.89%
48.91%
13.49%
                                                             478 ArgGluAsnGluTrpLys 483
                                                                                            861 CCTGGGAACACTTGGCAG
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                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
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- Oy 410 AsnGlyCysPro 413
  Db 9798AGAGGGACCCT 990
- Search completed; March 21, 2003, 12:34:04 Job time: 73.1137 secs

Scoring table:

Total number Minimum DB Maximum DB

Maximum

Searched:

Perfect score:

Sequence:

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Run on:

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Sequence 247, App
Sequence 725, App
Sequence 33, Appl
Sequence 156, Ap
Sequence 1138, Ap
Sequence 1138, Ap
Sequence 7, Appl
Sequence 961, App
Sequence 255, App
Sequence 255, App
Sequence 255, App
Sequence 255, App
Sequence 1178, App
Sequence 255, App
Sequence 255, App
Sequence 255, App
                                     Sequence 3946, Ap Sequence 786, Ap Sequence 2094, Ap Sequence 2047, Ap Sequence 206, App Sequence 206, App Sequence 206, App Sequence 208, App Sequence 48, App Sequence 448, App
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Treacy, Maurice
Spaulding, Vikki
INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
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COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DoS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
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0S-09-964-824A-255

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STREET: 87 CambridgePark Drive
CITY: Cambridge
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Evans, Cheryl
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McCoy, John M.
LaVallie, Edward R.
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"MODEL-frame+_p2n.model -DEV=xlp

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"C-cgn2_1/USPTO_Spool/US09763712/runat_14032003_100950_18119/app_guery.fasta_1.1877
-DE-published_Applications_NA -OFWT-fastap -SUFFIX-rnpb -MINNATCH=0.1

-LOOPEXT=0 -LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX=blosum62

-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE-pct -THR_MAX=100

-THR_MN=0 -ALIGN=15 -MODE-LCCAL -OUTFWT-pto -NORM-ext -HEAPSTIZE=500 -MINLEN-0

-THR_MN=0 -ALIGN=13 -NO_ENDSTIZ_GCGN 1.1.123 @runat_14032003_100950_18119
-NCFU6 - ICPU=3 -NO_XIPXY -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -LONGLOG
-DEV_ITMEOUT=120 -WARN_TIMEOUT=30 -THRRADES=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPDP=6
-FGAPEXT=7 -YGAPDP=10 -YGAPEXT=0.5 -DELCOP=6 -DELEXT=7
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Sequence 2274, Ap
Sequence 57, Appl
Sequence 57, Appl
                                                                                            March 21, 2003, 08:23:12; search time 265.779 seconds (without alignments) 1596.010 Million cell updates/sec
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1 MYSHNVVIMNLNNLNLTQVQ......EDVNNFICEKDRETVLSSAL
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
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/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
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               GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                     - nucleic search, using frame_plus_p2n model
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US-09-954-456-2274
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US-09-992-600A-57
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Listing first 45 summaries
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Fgapop 6.0 , Fgapext
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Matches:
Conservative:
Mismatches:
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      APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <UNKNOWN>
                                                                                                                           NO: 198
                                                                                                                                                                                            Gaps:
                                   NAME: Sprunger, Suzanne A.
REGIZRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
ORMATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
                                                                                                                           DESCRIPTION: SEQ ID
                                                                                     LENGTH: 2930 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                            ATTORNEY/AGENT INFORMATION:
APPLICATION DATA:
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ULE TYPE: CDNA
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Best Local Similarity:
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US-09-745-763-198
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                                  LysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGlu
                                                                     SerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluPro
                                                                                       ArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGly
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990 ATTTACGGAGGCACAGCTGCTGTGCACACGGCTGGTGGACAGTTGGCCTCTCCACGCTC 1049
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                                               820 GGAGAAAGTGGGCTTCCAGATGTTGCTTCTCTGAGGCAGCAGCATGAGGCCTTACAGGGA 879
383 GlyProProGlyProProGlyProSerGlyAlaValValProLeu---AlaLeuGlnAsn 401
                                                                                                                            rArgGluGluGlnGlnTrpIleLysLysGlnMetValGlyArg---GluSerHisTrpIl
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APPLICANT: Tanaka, Hiroaki
TILEO E INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.052.REG
CURRENT APPLICATION: HUMAN CDNAS, 4340
CURRENT FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR PILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
                                                                                              GluProThrProAlaProGluAspAsnGlyCys--
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1278 TCTTGTGGTCTGCGAG 1293
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SOFTWARE: JPatent
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LOCATION: 965..1133
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LOCATION: 1..475
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         TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancaration: Sets
TITLE OF INVENTION: Sets
FILE OF INVENTION: Sets
FILE OF INVENTION: Sets
CURRENT FILE OF INVENTION: Sets
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR PAPLICATION NUMBER: US/60/234,923
PRIOR PAPLICATION NUMBER: US/60/234,923
PRIOR PAPLICATION NUMBER: US/60/235,134
PRIOR PLING DATE: 2000-09-25
PRIOR PAPLICATION NUMBER: US/60/235,637
PRIOR PLING DATE: 2000-09-25
PRIOR PAPLICATION NUMBER: US/60/235,637
PRIOR PLING DATE: 2000-09-26
PRIOR PLING DATE: 2000-09-27
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PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR FILING DATE: 2000-09-27
NUMBER OF SEQ ID NOS: 2276
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APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US4.DIV
CURRENT APPLICATION NUMBER: US/09/992,600A
CURRENT FILING DATE: 2001-11-13
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
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                                Conservative:
Mismatches:
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR PILING DATE: 2001-07-13
PRIOR PILING DATE: 2001-06-29
PRIOR PRICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR PLICATION NUMBER: US 60/298,574
PRIOR FILING DATE: 2001-06-15
PRIOR PLING DATE: 2001-06-15
NUMBER OF SEQ ID NOS: 114
SOFTWARE: JPALEGET
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LENGTH: 1133
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Fri Mar 21 12:50:43 2003

3 Qy 334ProGlyProProGlyLysGluGl 9 Bb 4392 GGCATCCTGGTCCTGTGGGACG 4 Qy 343 ProGlyProGlnGlyProProGlyPhe 9 HILLILLI	0y 351 0b 4512 0y 352	Db 4572 GGTGACCGAGGCCTCCTGGAACTCAAGG Qy 364 ProGlyProArgGlyLeuProGlyLeuPr		DD 4849 -CAGATGCAGATGATAATTCTTGATTA  QY 457	267 4091 268 4091 268 268 268 268 269 269 269 269 269 27 4151 280 29 290 200 200 200 200 200 200 200 200	
Qy         370 ProGlyLeuPro         373	Oy 375 ValProGlyMetProGlyProLysGlyProProGlyProProGlyProSerGly 392 :::	RESULT 5 US-09-919-497-6  Sequence 6, Application US/09919497  Patent No. US20020106662A1  APPLICANT: MUTECT, George L.  TITLE OF INVENTION: PROGNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER  FILE REFERENCE: B0801/7225  CHRRENT ADDITOMITON NUMBED: US/09/419-497	CURRENT FILING DATE: 2001-07-31 PRIOR APPLICATION NUMBER: US 60/221, PRIOR FILING DATE: 2000-07-31 PRIOR FILING DATE: 2000-07-31 NUMBER OF SEQ ID NOS: 100 SEQ ID NO 6 LENGTH: 6158 LENGTH: 6158 LENGTH: 6158 FEATURE: FEATURE: FEATURE: LOCATION: (2434). OTHER INFORMATION: n = a, c, g or t S-09-919-497-6	Alignment Scores:  2.4e-16 Length: 6158  Score: 453.00 Matches: 130  Score: 39.81% Conservative: 38  Percent Similarity: 30.81% Mismatches: 76  Query Match: 15.26% Indels: 180  DB: 105-09-763-712A-2 (1-547) x US-09-919-497-6 (1-6158)	rgGlyProArgilyaspargGlyBerGlnGlyProProGlyProArgilyaspargGlyBerGlnGlyProArgilyaspargGlyBerGlnGlyProArgill	

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entifying Anti-Cancer Therapeutic Agents Using C
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                                                         |||||||
|GTCTCCCTGGAGCTGCAGGCCAAGATGGACCA 4451
                                                                                                                                             CCTGGTCTCAAAGGTGACCCTGGCTCCAAGGGT 4511
                                                                                                                                                                                                                  TGATTGGTCCTCCAGGAGAACAAGGGGAAAAA 4571
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||||||| ||||||||::||||||||::
|CTGGTCCTCCAGGCTTACCAGGTCCTCAAGGC 4691
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|CTCAGCCATCCTGACTTCCCAGATGGTGAATA 5026
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AAAATCTGAGGGAGTAAG-AATTTCATCATGGC 5151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 304 LysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro--- 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      248 GlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyPro 267
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TITLE OF INVENTION: Sets
FILE REFERENCE: 689290.76
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR PAPLICATION NUMBER: US/60/233,617
PRIOR PAPLICATION NUMBER: US/60/234,052
PRIOR PELING DATE: 2000-09-20
PRIOR FILING DATE: 2000-09-25
PRIOR PILING DATE: 2000-09-26
PRIOR PILING DATE: 2000-09-26
PRIOR PILING DATE: 2000-09-26
PRIOR PILING DATE: 2000-09-26
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) OTHER INFORMATION: n=a,t,g
US-09-954-456-762
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30.81%
15.26%
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ORGANISM: Homo sapiens
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Best Local Similarity:
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οy	343	ProGlyProGlnGlyProProGlyPhe	351
đ	0 4452	CCTGGTCCTATGGGACCTCCTGGCTTACCTGGTCTCAAAGGTGACCCTGGCTCCAAGGGT	4511
Οy	351		351
qq	4512	GAAAAGGGACATCCTGGTTTAATTGGCCTGATTGGTCCTCCAGGAGAACAAGGGGAAAAA	4571
Οy		GlnGlyLeuGlnGlyThrValGlyGluPro	363
đ	4572	GGTGACCGAGGGCTCCCTGGAACTCAAGGATCTCCAGGAGCAAAAGGGGATGGGGGAATT	4631
Qγ	36	ProGlyProArgGlyLeuProGlyLeuProGlyWalProGlyMetProGlyProLys	382
QΩ	0 4632	CCTGGTCCTGGTCCCTTAGGTCCACCTGGTCCTCCAGGCTTACCAGGTCCTCAAGGC	4691
δλ	382		382
qa	0 4692	CCAAAGGGTAACAAAGGCTCTACTGGACCCGCTGGCCAGAAAGGTGACAGTGGTCTTCCA	4751
δŏ	383	GlyProProGlyProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGlu	402
qα	4752	GGGCCTCCTGGGCCTCCAGGTCCACTGGTGAAGTCATT	4793
δy	403	ProThrPro-AlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLy	422
qq	5 4794	CCTTTACCAATCTTGTCCTCCAAAAAAGGA	4824
Qy	422	sCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGluAs	442
qq	0 4825	GAAGACATACTGAAGGCATGCAAG	4848
Οy	442	pLysSerSerHisLeuValPheIleAsnThrArgGluGluGlu	456
qa	4849	- CAGATGCAGATGATAATATTCTTGATTACTCGGATGGAATGGAAGAAATATTTGGTTCC	4907
δλ	457	GlnTrplleLysLysGlnMe	463
qq	4908	CTCAATTCCCTGAAACAAGACATCGAGCATATGAAATTTCCAATGGGTACTCAGACCAAT	4967
οy	463	tValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLy	483
qq	4968	cca-gcccdaacttgtaaagacctgcaactcagccatcctgacttcccagatggtgaata	5026
Óλ	483	STrpLeuAspTJyThrSerProAspTyrLysAsnTrpLy	. 496
qa	5027	TIGGATICATCCTAACCAAGGTIGCTCAGGAGATICCTICAAAGTITACTGTAATTICAC	5086
Qγ	496	lyHisGlyProGlyGluAspCysAlaGl	516
qa	5087		5105
٥y	516	ulleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCysGl	536
qq	5106	-ATTATCCAGACAAAAATCTGAGGGAGTAAG-AATTTCATGGC	5151
δy	536	uLys 537	
qa	5152	CAAA 5155	
RE US	US-09-954-45; Sequence ; Patent No.; GENERAL IN	SULT 7 -09-954-456-782 Sequence 782, Application US/09954456 Patent No. US20020115057A1 GENERAL INFORMATION:	
	APPLICA TITLE (	APPLICANT: Young, Paul TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic TITLE OF INVENTION: Sets	Agents Usin
	FILE RE	FERENCE: 689290-76 APPLICATION NUMBER: US/09/954,456	
	CURRENT PRIOR A	CURRENT FILING DATE: 2001-09-18 PRIOR APPLICATION NUMBER: US/60/233,617	
••	PRIOR	711,1NG DATE: 2000-09-18	

Fri

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2016 GAACAAGGCCCTGCTGCTCCCC---GGATTCCAGGGTCTCCCTGGTCCTGGTCCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1005 CCTGGCGCAGATGGTGTTGCTGGTCCCAAGGGTCCCGCTGGTGAACGTGGTTCTCCTGGC 1664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1836 GCCCGTGGTCAGGCTGTGTGATGGGATTCCCTGGACCTAAAGGTGCTGCTGGAGGCC 1895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProAlaGlyPro-----ProGlyGluArgGlyGlyLysGlySerLysGlySerGln 310
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Genbank Accession No. US20020142981A1 Z74615 US-09-880-107-3946
                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: HOUTE, Darci T.
APPLICANT: Workley, Joseph G.
APPLICANT: Workley, Joseph G.
APPLICANT: Gene Logic, Inc.
TILLE OF INVENTION: Gene Expression Profiles in Liver Cancer;
FILE REFERENCE: 4421-5028-WO.
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/210,379
PRIOR APPLICATION NUMBER: US 60/210,379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266 GlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluPro---
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                                                                                       2073 CCAGGTGAAGCAGGCAAACCTGGTGAACAGGGTGTTCCT 2111
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Matches:
Conservative:
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                                                               -------ProGluAspAsnGlyCysPro
                                                                                                                                                                                    ; Sequence 3946, Application US/09880107
; Patent No. US20020142981A1
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ORGANISM: Homo sapiens
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Best Local Similarity:
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              PRIOR FILING DATE: 2000-09-20
PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR APPLICATION NUMBER: US/60/235,134
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR PELLING DATE: 2000-09-26
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR PAPLICATION NUMBER: US/60/235,711
PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,711
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR APPLICATION NUMBER: US/60/235,840
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR FILING DATE: 2000-09-27
SEQ ID NOS FEQ ID NOS: 2276
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APPLICATION NUMBER: US/60/234,052 FILING DATE: 2000-09-20
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US-09-954-456-782
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					Using Cand			· :						<del> </del>		_
	QY 376 ProGlyMetProGlyProLysGlyProProGlyProProGlyProSerGly 392   11	Oy 393AlaValProLeuAlaLeuGlnAsnGluProThrProAla 406	Oy 407	RESULT 9 US-09-954-456-786 Sequence 786, Application US/09954456 Parent No. US20020115057A1 GENERAL INFORMATION:	<ul> <li>TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents;</li> <li>TITLE OF INVENTION: Sets</li> <li>FILE REFERENCE: 689290-76</li> <li>CURRENT APPLICATION NUMBER: US/09/954,456</li> <li>CURRENT FILING DATE: 2001-09-18</li> </ul>	· ` ` · ` ` · ` · ·	FRICH APPLICATION NUMBER: US/00/234,923  FRICH FILING DATE: 2000-09-25  FRICH FILING DATE: 2000-09-25  FRICH FILING DATE: 2000-09-25  FRICH FILING DATE: 2000-09-25	FRICH AFFLICATION NUMBER: US/0U/233,03/ FRICH FILING DATE: 2000-09-26 FRICH APPLICATION NUMBER: US/60/235,638 FRICH FILING DATE: 2000-09-26 FRICH APPLICATION NUMBER: US/60/235,11	PRIOR FILING DATE: 2000-09-27  PRIOR APPLICATION NUMBER: US/60/235,720  PRIOR FILING DATE: 2000-09-27  DPIOR ADDITAMINATION NUMBER: US/60/235,000	PILLING DATE: 2000-09-27 APPLICATION NUMBER: US/60/235, FILLING DATE: 2000-09-27	Patentin ver 786 5416	) ORGANISM: Homo sapiens US-09-954-456-786	Alignment Scores: 6.53e-16 Length: 5416 Pred. No.: 444.00 Matches: 115 Score: 43.40% Conservative: 23 Best Local Similarity: 36.16% Mismatches: 79 Query Match: 14.95% 14.95% 102 DB:	<pre>Qy 197 IleargLeuAspSerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAsp 216</pre>	Oy 217 ThrGluValAlaAsnLeuSerValIleMetGluGluMetLysLeuValAspSer 234	Qy 235LysHisGlyGlnLeuIleLysAsn 242

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                                     TYPE: DNA
ORGANISM: Homo sapiens
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18-10-044-090-104
Sequence 104, Application US/10044090
Sequence 104, Application US/10044090
Patent No. US20020137081a1
Patent No. US20020137081a1
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL Program
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                                    ---ValProLeuAlaLeuGlnAsnGluPro
                                                        3119 CTACCTGGTGTGCTGGTGTGTGAACCTGGTCTCTTGGCATTGCCGGCCCTCT
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                                                                                                  ---ThrProAlaProGluAspAsnGlyCysPro
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OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.19
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LOCATION: 1492-1495, 1663, 1669, 4012, 4055
OTHER INFORMATION: a, t, c, g, or other
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                                    ProProGlyProSerGlyAlaVal---
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Db 2189 CCTGGT	Qy 267 ProThr(      Db 2249 CCTGCT	QY 287 GlyGlui       Db 2309 GGATTT	Qy 304 LysGly6	Qy 311	Db 2429 CCAGCTC	(4)	Oy 328 SerGly <sup>1</sup>	2549 T	34/ 34/ du	353	Db 2669 GGTGAGA	Oy 367 ArgGlyI	Db 2729 CAGGGTC	Qy 387 ProProC	Db 2789 CTACCTC	404	Db 2849 GGGCCC	RESULT 13 US-09-925-299-206 ; Sequence 206, R ; Publication No. ; GENERAL INFORM ; APPLICANT: ROS	FILE REFERENCE		; PRIOR APPLICAT ; PRIOR FILING D	; NUMBER OF SEQ ; SOFTWARE: Pate	; SEX ID NO 200 ; LENGTH: 5145 ; TYPE: DNA	; ORGANISM: HON ; FEATURE:	; NAME/KEY: MIS ; LOCATION: (4) ; OTHER INFORMS	; NAME/KEY: mis ; LOCATION: (17 ; OTHER INFORM
Db 1727 GCTGGTGAGAAGGGTCCCTCTGGAGAGGTGGTAGTTGCTGGACCTCCTGGACTTCCAGGT 1786	Oy 366 ProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro 385	GlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGlu	403	sur 12	75-01-17-3947 ; Sequence 3947, Application US/09880107 ; Patent No. US20020142981A1	4	APPLICANT: Scherf, Uwe ; APPLICANT: Gene Logic, Inc.	; TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer ; FILE REFERENCE: 4491-5028-W0 . TIDDENU ADDITATOM MINDED. HS AND ADDITAM MINDED.	CORRECT FILING DATE: 2001-0-10/ PRIOR APPLICATION NUMBER: US 60/211.379	; PRIOR FILING DATE: 2000-06-14 ; PRIOR APPLICATION NUMBER: US 60/237,054	FATOR FILLING DATE: 2000-10-02 NUMBER OF SEQ ID NOS: 950 SORTWARE: Datentin Ver 2 1	3947	: TYPE: IN SOURCE SOURC	CENTRICE: CATURE Septens Consider No. US20020142981A1 274616		; OTHER INFORMATION: n = a or c or g or t US-09-880-107-3947	Alignment Scores:		US-09-763-712A-2 (1-547) x US-09-880-107-3947 (1-5086)	OY 197 IleArgLeuAspSerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAsp 216 :::     :::::	tGluGluMetLys	Db 2010 CTGGTGTGGTTGGTGTGGTGGCGCACTGGTCCATCTGGTCCTAGTGGACTCCCAGGAG 2069	235	2070 AGAGGCGTGCTGCTGGCATACCTGGAGGCAAGGGAGAAAAGGGTGAACCTGGTCTCAGAG	D 2130 GTGAAATTGGTAACCCTGGCAGAGATGGTGCTCGTGGTGCTCCATGGTGCTGTA-GGTGCC 2188	Oy 250 ProGlyProArgGlyBroArgGlyAspArgGlySerGlnGlyProProGly 266

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Rosen et al.

RENGEN PALO2

RENGE: PALO2

PPLICATION NUMBER: US/09/925,299

PLICATION NUMBER: PCT/US00/05883

LICATION NUMBER: PCT/US00/05883

ING DATE: 2000-03-08

LICATION NUMBER: 60/124,270

ING DATE: 1999-03-12

ENG DATE: 1999-03-12

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Patent No. US20020055627A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies FILE REPERENCE: PA.02
CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FLING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: PCT/US00/05883
                                                                                                                                Conservative:
Mismatches:
Indels:
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NAME/KEY: misc_feature
LOCATION: (5126)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (5143)
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US-09-925-299-206
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OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc_feature
LOCATION: (17)
OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc_feature
LOCATION: (5126)
PRIOR FILING DATE: 2000-03-08
PRIOR APPLICATION NUMBER: 60/124,270
PRIOR FILING DATE: 1999-03-12
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14.848
                                             NUMBER OF SEQ ID NOS: 1556
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 206
LENGTH: 5145
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LOCATION: (5143)
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                                                                                                                              ORGANISM: Homo sapiens
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Best Local Similarity:
Query Match:
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Search completed: March 21, 2003, 12:31:42
Job time : 295.779 secs
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                                                                                Sequence 22, Application US/10044090
Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SEQ ID NO 22
SEQ ID NO 22
LENGTH: 5432
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2403 AGAGGGGTGCTGCTGGCATACCTGGAGGAGAGAAAAAGGGTGAACCTGGTCTCAGAG 2462
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                ----ThrProAlaProGluAspAsnGlyCysPro 413
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                                                                                                                                                                                                                                                                                                                          ; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
US-10-044-090-22
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Matches:
Conservative:
Mismatches:
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35.85%
14.84%
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                          RESULT 15
US-10-044-090-22
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GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.

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(without alignments)
4899.781 Million cell updates/sec
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1 MYSHNVVIMNLNNLNLTQVQ........EDVNNFICEKDRETVLSSAL 547
                                    March 21, 2003, 08:08:41; Search time 1808.03 Seconds
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OM protein - nucleic search, using frame_plus_p2n model
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Maximum Match 100%
Listing first 45 summaries
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Xgapop 10.0, Xgapext
Ygapop 10.0, Ygapext
Fgapop 6.0, Fgapext
Delop 6.0, Delext
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Maximum DB seq length: 2000000000
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                                      Run on:
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em\_gss\_mus:\* em\_gss\_other:\* em\_gss\_pro:\* gb\_gss:\* em\_gss\_hum:\* em\_gss\_inv:\* em\_gss\_pln:\* em\_gss\_vrt:\* em\_gss\_fun:\* em\_gss\_mam:\* em\_gss\_rod:\* gb\_est4:\*
gb\_est5:\*
em\_estfun:\* em\_estin:\*
em\_estmu:\*
em\_estov:\* em\_estom:\* em\_esthum:\* em\_estpl:\*
em\_estro:\*
em\_htc:\* em\_estba:\* gb\_est1:\*
gb\_est2:\*
gb\_htc:\* gb\_est3:\* EST:\* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Coore Match Length DB ID    Score Match Length DB ID   1466.5 93.1 3305 11 BC0   1394.5 47.0 956 14 BQ0   1256 42.3 861 14 BQ0   1256 42.3 861 14 BQ0   1257 33.4 568 14 BQ0   1007 33.9 668 14 BQ0   1007 32.2 601 10 BE2   1007 32.2 601 10 BE2   1007 32.2 601 10 BB2   1007 32.2 601 14 BM0   1007 32.3 507 14 BM2   1007 32.3 507 17 BM2   1007 32.	IES Descriptió		162 BC00916	92/ 823 823	#3.4 DV03.143 873 BO71387	109 B145610	501 BO93450	303 BE91080	307 BO67480	299 BE29029	13 AL568743	513 BQ12751	353 AW95805	364 BB24806	750 BF80575	366 BQ77136	308 BM3/330	923 BF85692	984 BI44588	108 BM90710	#30 AM3/343	51 AA304251	30 AL543000	10 AA361/40	112 E169741	163 BQ8871	0 W27610	743 BB/49/4	VYG AL30969	315 B145601	813 BE92981 816 BO95561	943 BG68194	9235 BI24923	3020 BCU13020 BCU13020 BC	55556 25556 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506 26506	2937 BQ222937 AC	2234 BQ942234 AGENC	1919 BG171919 60233	5818 BM425818 pgf2c.pk0 3976 BB613976 BB613976	ALIGNMENTS	mRNA linear HTC 0		
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DEFINITION Mus musculus, Similar to scavenger receptor with C-type lectin, clone IMAGE:2811487, mRNA.

CLONE GOOGNES.

ACCESSION BC009162.1 GI:14714370

KEYWORDS HTC.

SOURCE Name and Soulus Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus.

TITLE Direct Submission

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                                             NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing Dy: Baylor College of Medicine Human Genome
Sequencing Center
Conter code: BCM-HGSC
Web Site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunnartne, P.H., Garcia, A.M., Lu, X., Hulyk, S.W., Hale, S.M.,
Yoon, V.S., Kowis, C.R., Lawrence, S., Martin, R.G., Muzny, D.M.,
Richards, S., Gibbs, R.A.
Submitted (05-JUN-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                          Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 5 Row: h Column: 10
This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF
                                                                                                                                                                                           Hulyk, S.W., Hale, S.M.,
Martin, R.G., Muzny, D.M.
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Location/Qualifiers

1. 3305

/organism="Mus musculus"
//db_xref="taxon:10090"
//map="c578L/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 GlnArgAsnLeuIleThrAsnLeuGlnArgSerValAspAspThrSerGlnAlaIleGln
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Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="Mammary tumor.
old, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH108"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Vector: pCMV-SPORT6"
757 c 760 q 757 t
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93.13%
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Best Local Similarity:
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BQ891432 AGENCOURT 8754195 NIH_MGC_130 Mus musculus cDNA clone IMAGE:6332754 5', mRNA sequence.
BQ891432.1 GI:22283446
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 936)
NIH-MGC http://mgc.nci.nih.gov/.
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                                                  151 IleIleSerAsnIleSerTyrThrAlaHisHisLeuArgThrLeuThrSerAsnLeuAsn 170
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                                                                                                                                                                                                                 GluValArgThrThrCysThrAspThrLeuThrLysHisThrAspAspLeuThrSerLeu
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S NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

L Oppublished (1999)

Contact: Robert Strausberg, Ph.D.

Emal: cgapbs-r@mail.nih.gov
Tissue Procurement: Susan L. Sullivan, Phb.

CONA Library Preparation: Resea, Invitrogen Corp

CONA Library Arrayed by: The I.M.A. G.E. Consortium (LINL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:

http://image.linl.gov

Plate: LLAM13740 row: 1 column: 13
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High quality sequence stops: 665.

Location/Qualifiers

/organism="Mus musculus"
/db_xref="taxon:10090"
/clone_"Inh="NHMGE:6313500"
/lab_host="DH10B (phage-resistant)"
/note="organ: olfactory epithelium; Vector:
pckN-SPORT6.1.codb; Site_1: EcoRV; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.2 kb. Constructed by ResGen, Invitrogen Corp. Note: this is a NHH MGC Library."
                                                                                                                                                                                                                                         BQ955927
AGENCOURT_8763247 NIH_MGC_129 Mus musculus cDNA clone IMAGE:6313500 5', mRNA sequence.
BQ955927.1 GI:22371405
                         2180
                                                                                                                       2241 CAGTGGAATGACTTCCAGTGTGATGAAATCAATAACTTCATTTGTGAGAAGGAAAGGGAG 2300
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              GluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnPro
                                                     AspAsnTrpGlyHisGlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGly
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TITLE
JOURNAL
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KEYWORDS
SOURCE
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BQ955927
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AUTHORS
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BQ713873
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                                                      Freeman
                                                                                                                                                                                                                       /organism="Mus musculus"
/db_xref="taxon:10090"
/clone="InAGE:6332754"
/clone=lib="NHH_MGC_130"
/lab_host="DH10B (phage-resistant)"
/note="Organ: otcoysts: y Vector: pCMV-SPORT6.1.ccdb;
Site_1: EcoRv; Site_2: NotI; Cloned unidirectionally.
Primer: Oligo dr. Average insert size 1.95 kb.
constructed by ResGen, Invitrogen Corp. Note: this is
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Unpublished (1999)
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                                                                          CDNA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Platte: LLAM13790 row. n column: 19
High quality sequence start: 25
High quality sequence stop: 632.
Location/Qualifiers
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Conservative:
Mismatches:
                                    Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Mark Maconochie,
Ph.D.
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                         Contact: Robert Strausberg, Ph.D.
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IsM Mus musculus

Eukaryota; Metazoa; Chordata; Craniata: Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata: Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Sclurognathi; Muridae; Murinae; Mus.

I (bases 1 to 861)

NIH-MGC http://mgc.ncl.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

National Institutes of Health, Mammalian Gene Collection (MGC)

Dupublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: Gapbbs-remail.nih.gov

Tissue Procurement: Susan L. Sullivan, PhD.

CDNA Library Preparation: ResGen, Invitrogen Corp

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bloscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM13721 row: n column: 01

High quality sequence stop: 598.
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Mus

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/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sall; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys, NIH"
        E (bases 1 to 966)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://mage.llnl.gov
Plate: LiAM11636 row: b column: 17
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Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae;
1 (bases 1 to 906)
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/db_xref="taxon:10090"
/clone="IMAGE:5251888"
/clone=lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross ti/dev_stage="7 months"
/lab_host="DH10B"
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B1456109.1 GI:15246765  
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NIH-MGC http://mgc.nci.nih.gov/.
NIH-MGC http://mgc.nci.nih.gov/.
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs rémail.nih.gov
Tissue Procurement: Mark Maconochie, Ph.D. and Nancy L. Freeman, Ph.D.
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/clone="IMAGE:6330794"
/clone=lib="NIH_MGC_130"
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/note="Organ: otocysts; Vector: pCWV-SPORT6.1.ccdb; Site=1: EcoRv; Site_2: NotI; Cloned unidirectionally.
Primer: Oligo dr. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is
542
                                                                               365
                                                                                                    602
                                                                                                                       366 ProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro 385
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

http://image.llnl.gov

High quality sequence stop: 352.
                                                                                                                                                                  346 GlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGly
                                                                                        AlaProGlu--AspAsnGlyCysProProHisTrpLysAsnPheThrAsp---LysCysT
                                                                                                                                                                                                                                                         424 yrTyrPheSerVal---GluLysGluIlePheGluAspAlaLysLeuPheCysGluAspL
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225 c 205
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BQ934501
BQ934501.1 GI:22349884
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house mouse.
Mus musculus
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AUTHORS
TITLE
JOURNAL
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BQ934501
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                                                                                                                                                                  nAspLeuHisLysAspAlaGluAsnArgThrAlaIleLysPheAsnGlnLeuGluGluAr
                                                                                                                                                                                                                                                                                                                eLysAsnPheThrIleLeuGlnGlyProProGlyProArgGly-ProArgGlyAspArgG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260 lySerGlnGlyProPro---GlyProThr-GlyAsnLysGlyGlnLys-----GlyGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGATCTCAGGGGACCAACTGGGTCCAACTTGGCAACAAGGGGAACAAAAAAGGGAGAGAA
                                                                                 MetTyrSerHisAsnValValIleMetAsnLeuAsnAsnLeuAsnLeuThrGlnValGln
                                                                                                                      GlnArgAsnLeuIleThrAsnLeuGlnArgSerValAspAspThrSerGlnAlaIleGln
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  884
255
118
14
9
                   Conservative:
Mismatches:
Indels:
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           Matches:
                                               Gaps:
                                                                US-09-763-712A-2 (1-547) x BQ934501 (1-884)
6.64e-75
1219.50
92.54%
86.44%
41.07%
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	OY 484 TrpLeuAspClyThrSerProAspTyrLysAsn 494	Tissue Programment: ATCC  CDNA Library Preparation: Rubin Laboratory  CDNA Library Preparation: Rubin Laboratory  CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)  DNA Sequencing by: Agencourt Bioscience Corporation  Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:  http://image.llnl.gov.c column: 09  High quality sequence stop: 656.  FEATURES  Location/Qualifiers  // Organism="Homo sapiens" // Clone="IMAGE:6212672" // Clone="IMAGE:621672" // Librare Lype="Epidermold carcinoma, cell line" // Librare Lype="Epidermold carcinoma, cell line"	/dab_lost="Note" lost of page resistant) //dab_lost="Organ: salivary gland; Vector: pOTB7; Site_1: XhoI; Site_2: ECORI; CDNA made by oligo-dT priming. Directionally cloned into ECORIXXhoI sites using the following 5' adaptor: GGACGAGG(G). Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies). Note: this is a NIH_MGC Library."  BASE COUNT 216 a 148 c 167 g 137 t	Scores milari Simil h:
DEFINITION 61661855F1 NCI_CGAP_Mam1 Mus musculus cDNA clone IMAGE:3962292 5',  ACCESSION BE910803 ACCESSION BE910803.1 GI:10407765 KEYWORDS SOURCE ONGANISM Mus musculus UNA mamalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  REFERENCE I Charges 1 to 580) AUTHORS NIH-MGC http://mgc.nci.nih.gov/.  JUGNAL Unpublished (1999)	Email: cg Email: cg CDNA Lib CDNA Lib CDNA Lib CDNA Lib Clone di Found thr http://im Plate: LL High qual S	Library constructed by Life Technologies. Investigator providing samples: Gilbert Smith, NIH"  ORIGIN  Alignment Scores:  L.9e-61 Length: 580 Score:  L.9e-61 Matches:177 Percent Similarity: 92.67\$ Mismatches:177 Query Match:34.42\$ Conservative: 7  Best Local Similarity: 92.67\$ Mismatches:0  DB:  US-09-763-712A-2 (1-547) x BE910803 (1-580)  Oy 304 LysGlySerLysGlySerGlnGlyProLysGlySerProGlyLysProGly 323	6 AAGGATCCCAAGGGTCCCAAGGATCTCTTTTTTTTTTTT	Oy 364 ProGlyProArgGlyLeuProGlyValProGlyWetProGlyProLysGly 383

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AL568743 LIL_FL002_PL1 Homo sapiens cDNA clone CSODE005XH04 3 prime
                          Site_1: Sall
/dev_stage="7 months"
/lab.host="DH10B"
/note="Ordan: mammary; Vector: pCMV-SPORT6; Site_1: Sall
Site_2: Not1; Cloned unidirectionally. Primer: Oligo dr
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Robin Humphreys,
NIH"
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90.15%
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IMAGE:3484163 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: capabbs-remail.nlh.gov

Email: capabbs-remail.nlh.gov

Tissue Procurement: Lochar Hennighausen Ph.D., Robin Humphreys

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Prayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM8516 row: k column: 12

High quality sequence stop: 551.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mamalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 601)
NIH-MGC http://mgc.nci.nih.gov/.
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                        433 PheGluAspAlaLysLeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThr
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                                                                                                                                                                                                                           ProProHisTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLysGluIle
                                                                                                                                                                                                                                                                                                                                                       513 CysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsn
                                                                       393 AlavalvalProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsnGlyCys
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Mus musculus cDNA clone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /strain="C57BL/6J"
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  US-09-763-712A-2 (1-547) x BQ674807 (1-668)
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BE290299
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                                                                                        Li,WB., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
Email: segref@genoscope.cns.fr, Web : www.genoscope.cns.fr.
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221 c 217 g 290 t 17
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Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/db_xref="taxon:9606"
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/lab_host="DH108"
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916.50
91.15%
90.62%
30.87%
                    Eukaryota; Metazoa;
Mammalia; Eutheria;
1 (bases 1 to 967)
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JOSEA" BOULD LOI CHILLY FOLIC & HEAVOIL, MALL LOIS LET Adult islet"

Jab host-"Embryonic day 10.5, E12.5, E16.5, newborn, adult, mixed"

Jab host-"DH10B"

Jab host-"DH10B"

Jab host-"DH10B"

Jab host-"BH10B"

J
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 581)

Searce, M., Renty, G., Permutt, A., Lee, C., Kaestner, K.,
Lemishka, I., Scearce, M., Brestelli, J., Gradwohl, G., Clifton, S.,
Hillier, L., Marra, M., Pape, D., Wylie, T., Martin, J., Blistain, A.,
Schmitt, A., Theising, B., Ritter, E., Ronko, I., Bennett, J., Cardenas, M., Gibbons, M., McCann, R., Cole, R., Tsagareishvili, R., Williams, T.,
Jackson, Y. and Bowers, Y.
Endocrine Pancreas Consortium
Unpublished (2000)
Other_ESTS: 160006.x1
Contact: Douglas Melton, Klaus H. Kaestner, & Hiroshi Inoue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST 19-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Harvard University, Howard Bughes Medical Institute bept of Molecular and Cellular Biology, 7 Divinity Ave, Cambridge, MA 02138
Tel: 617-495-1812
                                                                                                                                                                                                                                                                                                                                                     ii60h06.yl Melton Normalized Mixed Mouse Pancreas 1 N1-AMS1 Mus musculus cDNA clone IMAGE:5946107 5' similar to TR:09UM15 Q9UM15 GSR2.; mRNA sequence.
BQ127513
BQ127513.1 GI:20201424
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                                                 Fax: 617-495-8557
Email: dmelton@blobp.harvard.edu
Librarly was constructed by Dr. Douglas Melton DNA sequencing br
Mashington University Genome Sequencing Center This clone is
available royalty-free through LLNL; please contact the IMAGE
consorttum (info@lange.llnl.gov) for further information
Seq primer: -40RP from Gibco
High quality sequence stop: 446.
    532
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/clone_lib="Welton Normalized Mixed Mouse Pancreas 1
N1-MMS1"
516 LeulleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCys
                                                                                                                                                                                                                                             GluLysAspArgGluThrValLeuSerSerAlaLeu
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/organism="Mus musculus"
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/db_xref="taxon:10090"
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Mus musculus
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Mus musculus
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Hegde, P., Oj.R., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., Holi, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and Quackenbush, J.
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                                                                                                                                       ValPheLeuGlnAlaLysLysAspThrAspTrpLeuLysGluLysValGlnSerLeuGln
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library."
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Contact: John Quackenbush
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used to make this
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177
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159 c 114 g
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Query Match:
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AUTHORS
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalla; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 638) Arakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BB248064 RIKEN full-length enriched, 7 days neonate cerebellum Musmusculus cDNA clone A730023E20 3', mRNA sequence.
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                    usa
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149
1
                   MD 20850,
                                                                                                                            // Organism="Homo sapiens"
/db_xref="taxon:9506"
/clone_lib="MAGE resequences, MAGE"
/note="Vector: pBluescriptsKm"
/ 112 c 143 g 121 t
                                                                                                                                                                                                                                                           Matches:
Conservative:
Mismatches:
The Institute for Genomic Research 9712 Medical Center Dr., Rockville, ME Tel: 301 838 8328 Fax: 301 838 0208 Email: johnq@tigr.org Plate: 115 Seq primer: Reverse.
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842.00
98.68%
98.03%
28.36%
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TITLE JOURNAL COMMENT

BASE COUNT ORIGIN Alignment Sco Pred. No.: Score: Percent Simil Best Local Sin Query Match: DB:	US-09-763-712  QY 385 Pro Pro QY 405 Pro QY 405 Pro QY 425 Tyr QY 425 Tyr QY 425 Tyr QY 445 Ser QY 445 Ser QY 445 Ser	Oy 465 Gly 1   1   1   0   243 GGG Oy 485 Leu Oy 505 H1s Oy 505 H1s Oy 525 Phe Oy 525 Phe Oy 545 Ser Oy 545 Ser	RESULT 14 BF805750/C LOCUS DOCUS DEFINITION D ACCESSION B VERSION B VERYWORDS E SOURCE ORGANISM H ORGANISM H AUTHORS D AUTHORS D AUTHORS S TITLE S COMMENT C LOCUS D AUTHOR D AUTHOR D AUTHOR C C C C C C C C C C C C C C C C C C C
<pre>'M., Koya,S., Matsuyama,T., Miyazaki,A., Nomura,K., Ohno,M., Okazaki,Y., Okido,T., Saito,R., Sakai,C., Sakai,K., Sano,H., Sasaki ,D., Shibata,K., Shinagawa,A., Shiraki,T., Sogabe,Y., Suzuki,H., Tagami,A., Tagawa,A., Takahashi,F., Takeda,Y., Tanaka,T., Toya,T., Muramatsu,M. and Hayashizaki,Y., et al. 2001) Unpublished (2001) On Jul 6, 2000 this sequence version replaced gi:8940810. Contact: Yoshihide Hayashizaki Laboratory for Genome Exploration Research Group, RIKEN Genomic</pre>	Sciences Center(GSC), Yokohama Institute The Institute of Physical and Chemical Research (RIKEN) The Institute of Physical and Chemical Research (RIKEN) Tol. 3 Und. 2012 Tel. 81-45-503-922 Fax: 81-45-503-9216 Fax: 81-45-503-92	10 (11), 1757-1771 (2000) Konno, H., Fukunishi, Y., Shibata, K., Itoh, M., Carninci, P., Sugahara, K. and Hayashizaki, Y. Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) Kondo, S., Shinagawa, A., Saito, T., Kiyosawa, H., Yamanaka, I., Aizawa, K., Fukuda, S., Hara, A., Itoh, M., Kawai, J., Shibata, K. and Hayashizaki, Y. Computational Analysis of Full-Length Mouse cDNAs Compared with Human Genome Sequences Mamm. Genome. 12, 673-677 (2001) Please visit our web site (http://genome.gsc.riken.go.jp/) for further details. CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Encyclopedia Project of Genome Exploration Research Group in Riken Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.  1. 638	/Organism="Muss mussulus" /db_xref="taxon:10090" /clone=!ha"RIKEN full-length enriched, 7 days neonate cerebellum" /tissue_type="cerebellum" /dev_stage="7 days neonate" /lab_host="bHOB" /rote="Site_1: Sal!: Site_2: BamHI; cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues. 1st strand cDNA was primed with a primer [5' GAGAGAGAGAAGACCAAGACTCTTTTTTTTTTTTTTTTT

FEATURES

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BF805750 511 bp mRNA linear EST 12-JAN-2001 QVI-CIL0173-071100-464-c02 CI0173 Homo sapiens cDNA, mRNA sequence. BF805750.1 GI:12134739
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 511)
1 objas Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F. F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deoliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
                                                                                                                                                                                                                                                                                                                                                       eGlnCysGluAspValAsnAsnPheIleCysGluLysAspArgGluThrValLeuSer 544
                                                                                                                                                                                                                    OAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLysCysTyr 424
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Conservative:
Mismatches:
Indels:
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Laboratory of Cancer Genetics
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/Organism="Homo sapiens"

/db_rstef="taxon:9606"

/clone_lib="C10173"

/dev_stage="Adult"

/dev_stage="Adult"

/dev_stage="Adult"

/note="Organ: colon_ins; Vector: pucl8; Site_l: SmaI;

Site_2: SmaI; A mini-library was made by cloning products

derived from ORESTES PCR (U.S. Letters Patent application

No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of

tissue mRNA and cDNA amplification were performed under

low stringency conditions."
                                    Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtmi2.pl?tl=QV1&t2=QV1-CI0173-07100-464-c02&t3=2000-11-07&t4=1)
Seq primer: puc l8 forward
High quality sequence stop: 492.
vig Institute for Cancer Research
Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
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BO771366 808 bp mRNA linear EST 26-JUL-2002
UI-M-FIO-byu-g-09-0-UI.rl NIH_BMAP_FIO Mus musculus cDNA clone
IMMGE:5702432 5', mRNA sequence.
                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.

Email: cgapbs r@mail.nih.gov

Email: cgapbs remail.nih.gov

Tissue Procurement: Dr. Jim Lin, University of Iowa

CDNA Library preparation: Dr. M. Bento Soares, University of Iowa

CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa

DNA Sequencing by: Dr. M. Bento Soares, University of Iowa

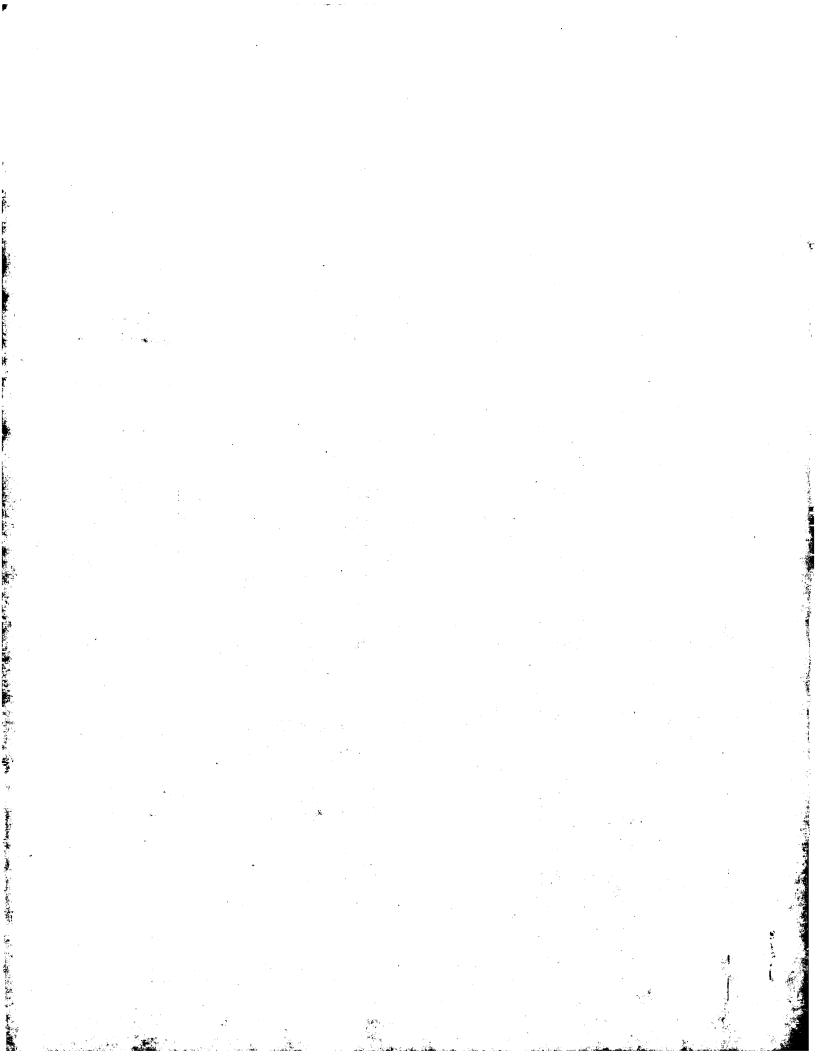
Clone Distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                          This clone was contributed by the Brain Molecular Anatomy Project
                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 808)
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
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Location/Qualifiers
                                                       BQ771366
BQ771366.1 GI:21979842
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767.00
93.33%
87.33%
25.83%
                                                                                                                              Mus musculus
                                                                                                             house mouse
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Query Match:
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62 AACTICACAGATAAATGCTACTATTTTCATTGGAAAAGAAATTTTTGAAGATGCTAAG 121

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538 AspargGluThrValLeuSerSeralaLeu 547 :::|||||| ||| ||| ||| ||| 422 GAAAGGAGGCAGTACCATCATCCATATTA 451
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L40156 Mus musculu
AX334792 Sequence
X65018 H.saplens m
X75911 B.taurus mR
BC022318 Homo sapl
AF509590 Bos tauru
BC008760 Homo sapl
BC00876 Homo sapl
BC0729 Human mRNA
M76739 Chinese ham
L06863 Cricetulus
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AC1102618 Wus muscu
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AP000915 Homo sapi
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AB007829 Homo sapi
E32511 Scavenger r
M81231 Rat pulmona
AF053538 Alvinella
BC003705 Mus muscu
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AX146424 Sequence
AR137273 Gallus ga
AF272662 Rattus no
AB009993 Mus muscu
AR014116 Sequence
AB015440 Rana cate
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AX45442 Sequence
AX490920 Sequence
AX047353 Sequence
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AB038519 Mus muscu
B052103 Homo sapi
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-MODEL-frame+ p2n.model -DEV=xlp
-MODEL-frame+ p2n.model -DEV=xlp
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4401.885 Million cell updates/sec
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1 MQQDLMRSRLDTEVANLSVI........EDVNNFICEKDRETVLSSAL 342
                                                                                                            March 21, 2003, 06:54:47; Search time 2261.11 Seconds
             GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                             nucleic search, using frame_plus_p2n model
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Maximum Match 100%
Listing first 45 summaries
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Ygapop 10.0 , Ygapext (
Fgapop 6.0 , Fgapext Delop 6.0 , Delext (
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Direct Submission
Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Department of Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa,
Hokkaido 778-8510, Japan (E-mail:ohtani@esahikawa-med.ac.jp,
Tel:+81-166-68-2393, Fax:+81-166-68-2399)
         PRI 21-NOV-2001 complete cds.
                                                                             Craniata; Vertebrata; Euteleostomi;
Catarrhini; Hominidae; Homo.
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J. Biol. Chem. 276 (47), 44222-44228 (2001)
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Mammalia; Eutheria; Primates;
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241 HisLeuValPheIleAsnThrArgGluGluGluGlnTrpIleLysLysGlnMetValGly
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from Patent WO0208284.
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Sequence 27 f
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Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J.,
Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
                                                                                          1018 GGCCCTCCTGGCCCATCAGGAGCGGTGGTGCCCCTGGCCGTGCAGAATGAGCCAACCCCG 1077
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Compositions and methods for the diagnosis and treatment of disorders involving angiogenesis
Patent: WO 0200690-A 27 03-JAN-2002;
Genenter, Inc. (US)
Location/Qualifiers
1. 2005
/organism="Hono sapiens"
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                                                                                                 Compositions and methods for the diagnosis and treatment of disorders involving angiogenesis Patent: WO 0208284-A 27 31-JAN-2002, Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone (US); Gerber, Hanspeter (US); Gerritsen, Mary E. (US); Goddard, Audrey (US); Goddwski, Paul J. (US); Gerrey, Austin L. (US); Hillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US); Paoni, Nicholas F. (US); Stephan, Jean-Philippe F. (US); Watanabe, Colin K. (US); Williams, P. Mickey (US); Wood, William
                                               Baker,K.P., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A.,
Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J.,
Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
              Euteleostomi;
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/organism="Homo sapiens"
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             Chordata;
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DEFINITION Sequence 39 from Patent w00068380.  ACCESSION AX047353 VERSION AX047353.1 GI:11876599 KEYWORDS Numan.  ORGANISM Homeo sapiens Eukaryota: Metazoa: Chordata: Craniata: Vertebrata: Euteleostomi; Mammalia: Eutheria: Primates: Catarrhini: Hominidae: Homo.  REFERENCE 1 (Dases 1 to 2641) AUTHORS Bandman.O. Hillman.J.L. Tang.Y.T., Lal.P., Yue,H., Baughn,M.R., Lu,D.A. and Azimzai.Y.  TITLE Extracellular matrix and adhesion-associated proteins JOURNAL Patent: W0 0068300-A 39 16-NOV-2000; FEATURES Location/Qualifiers Source 1.2641  /Organism="Homo sapiens" /db_xref="taxon:9606" /note="Incyte ID No: 4586187CBI" ORIGIN	Alignment Scores: 2.87e-58 Length: 2641 Pred. No.: 2.87e-58 Length: 2641 Score: 1934.00 Matches: 341 Best Local Similarity: 99.71% Conservative: 0 Best Local Similarity: 99.71% Mismatches: 1 Ouery Match: 6 Gaps: 0	US-09-763-712A-2_COPY_206_547 (1-342) x AX047353 (1-2641)     QY	41 LeuGlnGlyProProdlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProllog1032	OY 81 A.BGLYPTOLIGELYPTOALGALYPTOALGALYPTOALGALANGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGEGLYPTOALGALINGE		Db 1392 ccrcddddracrddccrddddracrdddccaddcccdddddddd
Db 478 ATGCAACAAGATTTGATGAGGTCGAGGTTAGACATGAAGTAGCCAACTTATCAGTGATT 537  Qy 21 MetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIle 40	Oy 121 GlyProSerGlyAspEroGlyProProGlyProProGlyLysGluGlyLeuProGlyPro 140	Oy 161 ProArgGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro 180	Db 1078 GCACCGGAGACAATAGCTGCCCCTCACTGGAAGACTTCACAAATGCTACTAT 1137  Qy 221 PheservalGluLysGluIlePheGluAspAlaLysLeuPheCysGluAspLysSerSer 240	261 ArgGluSerHisTrDileGlyLeuThrAspSerGluArgGluAsnGluTrpLySTrpLeu 2 11111111111111111111111111111111111	GlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPhe   IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Oy 341 Alaleu 342   11111   Db 1498 GCATTA 1503   RESULT 4   AXO47353   2641 bp DNA linear PAT 15-DEC-2000

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medical School, Division of Biochemistry, Biomedical Research Center; 2-2 yamadaoka, Suita, Osaka 565-0871, Japan (E-mail:knakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783(ex.3783), Fax:81-6-6879-3789)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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/protein_id="BAB39147.1"
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AspG1yThrSerProAspTyrLysAsnTrpLysAlaG1yG1nProAspAsnTrpG1yH1s
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                                                                                     HisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLysLysGlnMetValGly
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RGDRGSGGPPGPTGREEPGPPGPAGERGPIGFAGERGSKGSKGSQGPR
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Best Local Similarity:
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This clone (DKFzp547G1215) is available at the RZPD in Berlin.
This clone (DKFzp547G1215) is available at the RZPD in Berlin.
This clone (DKFzp547G1215) is available at the Charlottenburg, GERMANY; Email: clone@rzpd.de Further information about the clone and the sequencing project is available at http://mips.gsf.de/proj/cDNA/.
Location(Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1886 bp mRNA linear PRI 20-MAR-2002 DKFZp547G1215 (from clone DKFZp547G1215).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BUKATYOTA; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria: Primates; Catarrhini; Hominidae; Homo.

1 (basea 1 to 1886)

Koehrer,K., Beyer,A., Mewes,H.W., Well,B. and Wiemann,S.

Direct Submission

Submitted (12-MAR-2002) MIPS, Am Klopferspitz 18a, D-82152

Martinsried, GERMANY

Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKF2); Email s.wiemann@dkfz-heidelberg.de; sequenced by BMFZ (Biomedical Research Center at the Charite, Paris, Primary) within the CDNA sequencing consortium of the Germann Cancer Analysis.
                                                                 2188
                                                                                                                                  2248
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                                                                                                                                                                                                                                                                     2368
                                                                                                                                                                                                                                                                                               /clone="bkFzp547G1215"
//tssue_type="brain"
//clone_lib="547 (synonym: hfbr1). Vector pSport1; host
DH10B; site="Not1 + Sal1"
2069 TITICAGIIGAGAAAAAITITIGAGAIGCAAAGCIITITCIGIGAAGACAAGICIICA 2128
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                             2309 GGCCATGGGCCAGGAGAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGATTTC
                                                                                                                   281 AspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHis
                                                                                                261 ArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/db_xref="taxon:9606"
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AL713657
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KANNDTLEDMNSQLSSFTGQMDNITTISQANEGSLKDLQDLHKDTENRTAVKFSQLEE
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KGDRGSQGPPGPTGNKGQKGEKGEPGPPGPAGERGTIGPVGPPGERGSKGSKGSQGPK
GSRGSPGKPGPQGPSGDPGPPGFPGKDGLPGPQGPPGFQGLQGTVGEPGVPGPRGLPG
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KEIFEDAKLFCEDKSSHLVFINSREEQQWIKKHTVGRESHWIGLTDSEQESEWKWLDG
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Ohtani, K., Suzuki, Y., Eda, S., Kawai, T., Kase, T., Keshi, H.,
Sakai, Y., Fukuoh, A., Sakamoto, T. and Wakamiya, N.
Direct Submission
Submitted (18-JAN-2002) Katsuki Ohtani, Asahikawa Medical College,
Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido
078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:81-166-68-2393, Fax:81-166-68-2399)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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                                            ArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeu
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Sakai,Y., Eukuoh,A., Sakamoto,T., Itabe,H., Suzutani,T.,
Ogasawara,M., Yoshida,I. and Wakamiya,N.
cDNA cloning of mouse CL-Pl gene
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STANSELSTFRSDILDLAGQQQETERTSKNKDTLEKLQANGSLUKRCBOQAGKKAL
STANSELSTFRSDILDLAGQQQQETERTSKNKDTLEKLQANGSLUKBTQNN
SFLITTVANVTLQAYNTLQAYNTAQOTNVLGGNLQSQASSOSVVIMLNNLNLTQVQRN
LISNLQOSDDTSLATQRIKNDFQNLQQVFLQAKKDTDWLKRVQSLQTLAANNSALA
KANNDTLEDMNSQLSSFTGQMDNITTISQANEQSLKDTLKHTDDLTSLNNTLVNI
RLDSISLRMQDWMRSKLDFEVANLSVVMEEWKLUDSKHGQLIKNFTLDNTSLNNTLVNI
RLDSISLRMQDWMRSKLDFEVANLSVVMEEWKLUDSKHGQLIKNFTLLQFPGFPRGP
KGDRGSGGPFPFGREGEFGFFGFTGGAGERGTHGGPVGFPGGSKGSKGSGGSGFPG
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KEILLEDAKLFCEDKSSHLVFINSREEQQWIKKHTVGRESHWIGLTDSEQESEWKWLDG
SPVDYKNWKAGQPDNWGSGHGPGEDCAGLIYAGQWNDFQCDEINNFICEKEREAVPSS
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Molecular cloning of a mouse scavenger receptor with C-type lectin
(SRCL)(1), a novel member of the scavenger receptor family
Blochim. Blophys. Acta 1522 (1), 53-58 (2001)
                                                                                                                                                                                                               srcl mRNA for scavenger receptor with C-type lectin,
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2132 GACGGGTCACCTGTTGATTACAAAACTGGAAAGCTGGACAACCAGATAACTGGGGCAGT 2191
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                        GlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPhe
                                              2192 GGCCATGGGCCAGGAGAAGACTGTGCTGGCTTGATTTACGCAGGACAGTGGAATGACTTC
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/protein_id="BABB2497.1"
/db_xref="G1:18146952"
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/db_xref="taxon:10090"
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RANDTLEDNNSQLNSFTGQMENITTISQANGDNLKDLQDLHKDAENRTAIRFNQLEE
RFQLFETDIVNIISNISYTAHHLRTILISNLNEVRTCTDTLTKHTDDLTSLNNTLANI
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SFLITTVNKTLQAYNGYYTNLQQDTSVLQGNLDNQMYSHNVYTNNLNNLNLNLLNLTQVQQRN
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Nakamura,K. Funakoshi,H., Miyamoto,K., Tokunaga,F. and Nakamura,T.
Molecular cloning and functional characterization of a human
scavenger receptor with C-type lectin (SRCL), a novel member of a
scavenger receptor family
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Submitsed (04-DEC-2000) Kenji Nakamura, Osaka University Graduate
School of Medicine, Division of Biochemistry, Biomedical Research
Center; 2-2 yamadaoka, sulta, Osaka 565-0871, Japan
(E-mil: Kanakamur@onbich.med.osaka-u.ac.jp, Tel:81-6-6879-3783,
                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /product="scavenger receptor with C-type lectin type II"
/protein_id="BAB39148.1"
/db_xref="GI:13365553"
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1 MetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIle
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2 (bases 1 to 4330)
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Location/Qualifiers
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Best Local Similarity:
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KEYWORDS
SOURCE
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AUTHORS
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1923 TTTTTGTTTTGAGACAGGGTCTCACTCTGTTGCCCAGGCTGGAGTGCAGTGCGGTGATCT 1982
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                                                                                LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro
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3 TITTATGETATTATGETATGTATGGAACAGGGTCTCACTCTGTCACCCCAGGCTGGAAT  3 GACGAAGTGAAGTAGTATGTATGGAACAGGGTCTCACTCTGTCACCCCAGGCTTAGGTGA  3 TITTATTTATTTTTCCTCTCTTTTGTAGAACAGGTCTTGCAAGGGTTTGCCACCCCCCCC	205	2402	205 QY	2462	205 OY	2522	205 OY	2582	205 Oy	2642	OY OY	2702	205	2762	205 ACI12416	TGTGG 2822 DEFINITION	ACCESSION	2882	SOURCE ORGAN	GTTAG 2942	REFERENCE	3002	205	CATCC 3062	205	CTGCT 3122	205	GAACA 3182	205	CCACT 3242	205	GGGAC 3302	205	AAGGC 3362
	205	2343 TTTTATGTATTATGTGTGTATGTATGGGACAGGGTCTCACTGTCACCCAGGC	205	2403 GACGAAGTGAAGTGCAAACATAGCTCATTGCAGCTTTGACCTCCTGGGCTT	205	2463 TCTTCCCACTCAGACTCCTGCGTAGCTGGGACCACAGGGGTATGCCACACACC	205	2523 ATTITITATITICCTITITGTAGAAACAGGGTCTTGCTATGTTGCCAGGCTGG	205	2583 ACTCCTGGCCTCAAGCAACCCTCCTGCCTCAGTCTTGCAAAGTGCTGGGATTCC	205	2643 GAGCCACTGCACCTGGCTCTTGCACTTGTTTATTATAGGAGCCAGCC	205	2703 ACACAATGCAAAACATTTCCTTCAGGGAAGCCTGCTGGCCGCCCTGAGCGCTCT	205	2763 GTTTTACATCCTCACTCTGGAGATAGATGGGGTCCCTCGGTTAGCTCCATCAAC	205	2823 ATGGAACCCTCTGCTATTGATGACTACATTTAATTTCTTTTTGAGAAAGGTGTT	205	2883 TACGGTGCCTTCTAGTCTTTTGATAATTAAACCTTTGGCAAAACTCGAATGTTT	205	2943 CAACCAAGCCTATTTTTTTTCTCTTTGACCCAACCGCTATTCTACTTGATTTTG	205	3003 GAGGCCCGGGTTATTTTGTTGATCCGTGAGCCCCATTTTTGGTGCTGGGTTCTC	205	3063 AAGTGTTCCTGGGTTCCGTATGATTCCAGACTGACGCTGAACATCTGTGCCTGC	205	3123 TCTTGTTGTTGCTTCTGTCATTTCTGTCAAGAGGAGGGATCCAAACACAGA	205	3183 AAGACCCAGTCCAAGATCCATCAGATTATGTGGTTTCGGCTTGTGCTCTGCAG	205	3243 TTGGGTCATGCTTGCTGCGAGCACGTCCGTGAACGTCAGCTGTGGGCCTCGTGC	205	3303 GCTCAGGCTGCTCCCAGCGGGACCACAGTTTTGGCCTCTGAAACACAGAGGTGAAG

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Rattus.

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Rushard, Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C., Alaiban, C., Arej, T.R., Apple, M., Banks, T., Barbaria, J., Bingage, H.C., Arej, T.R., Apple, M., Banks, T., Barbaria, J., Benton, J., Bingage, K., Blankenburg, K., Bonnin, D., Bandaria, J., Benton, J., Bingage, K., Blankenburg, K., Bonnin, D., Banday, C., Barrell, R.L., Byrd, N.C., C., Carter, M., Cavacos, S.R., Chacko, J., Chavez, D., Chen, G., Con, C., Coyle, M.D., Dathorne, S.R., David, R., Chen, G., Coyle, M.D., Dathorne, S.R., David, R., Davis, C., Coyle, M.D., Dathorne, S.R., David, R., Davis, C., Davy-Carroll, L., Dederich, D.A., David, C., Davy-Carroll, L., Dederich, D.A., Davis, C., Davis, C., Coyle, M.D., Dathorne, S., Dinh, H.H., Davis, C., Davis, C., Coyle, M.D., Dathorne, S., Dinh, H.H., Davis, C., Davis, C., Elhaj, C., Escotto, M., Earnbart, C., Edgar, D., Edwards, C., Coyle, M., Falls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, F., Farraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, C., Harris, K., Hart, M., Havlak, P., Hawes, A., Hennandez, J., Hongis, R., Hart, M., Havlak, P., Hawes, A., Hennandez, J., Hodgson, A., Hoguson, M., Houlow, J., Jackson, L.E., Jackson, L.E., Jackson, L.E., Li, J., Li, Z., Lichtarge, O., Lieu, C., Liu, J., Liu, M., Loulseged, H., Lozado, R., Lu, X., Luder, A., Luder, M., Matine, M., Mall, M., Mableshwari, M., Meal, D., Martin, R., Martin, R., Marsin, M., Melly, S., Mansey, E., Mawhiney, E., Mctedi, M., Mellon, M., Okwuon, G., Miner, C., Miner, J., Mercen, J., Newtson, J., Newtson, N., Nickerson, R., Payton, B., Payton, B., Peter, J., Newtson, J., Newtson, N., Nickerson, R., Payton, B., Payton, R., Payt
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
alia; Eutherla; Rodentía; Sciurognathi; Muridae; Murinae;
VAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGAGAAGACTGT 3722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      308
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2416.3 GI:21743403
HTGS_PHASE1.
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us norvegicus
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GlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro 117
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6: gap of unknown length
6: gap of unknown length
6: gap of unknown length
7: gap of unknown length
7: gap of unknown length
7: contig of 10054 bp in length
7: gap of unknown length
8: contig of 12523 bp in length
9: contig of 13788 bp in length
9: contig of 13788 bp in length
9: contig of layin length
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Mismatches:
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/db_xref="taxon:10116"
/db_cref="ctaxon:10116"
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unknown
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79184:
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    23699
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34055
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NOTE: This is a "working draft' sequence. It currently consists of 28 contigs. The true order of the pieces is not known and their order in this sequence record is
Sodergren, E., Sonaike, T., Sparks, A., Stanley, H., Stone, H., Sutton, A., Svatek, A., Tabor, P., Tamerisa, A., Tamerisa, K., Tang, H., Tansey, J., Tayloro, T., Tayloro, T., Telfrod, B., Thomas, N., Thomas, S., Usmani, K., Vasquez, L., Vera, V., Villalon, D., Vinson, R., Wang, O., Wang, S., Ward-Moore, S., Warren, R., Washington, C., Watlington, S., Wullliamson, A., Wleczyk, R., Wooden, S., Worley, K., Wu, Y. E., Zhou, J., Zorrilla, S., Nelson, D., Weinstock, G. and Gibbs, R.
                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission Submission Submitted (13-JUL-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Jul 12, 2002 this sequence version replaced gi:2030333.
                                                                                                                                                                                                                                                                                      Department
                                                                                                                                                                                                                                                                                Submitted (21-FEB-2002) Human Genome Sequencing Center, Departmer of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA (bases 1 to 130763)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of reads
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chamletry: Dye-terminator Big Dye: 100% of re-
Assembly program: Phrap; version 0.990329
Consensus quality: 113686 bases at least Q40
Consensus quality: 115729 bases at least Q40
Consensus quality: 117044 bases at least Q20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Center: Baylor College of Medicine
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----- Summary Statistics
Sequencing vector: Plasmid;
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Qy Db	Qy Dp	Qy	οy	Q	δý	QQ	Οý	Db	οy	QQ	٥y	QQ	δλ	QQ	οy	q	οy	QQ	٥y	QQ	οy	QQ	ΟŸ	qq	Οy	Dρ	٥y	qq	٥y	QQ	Qy Dp	٥y

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Signature, B., Linton, L., Nusbaum, C., Lander, E., Ali, A., Allen, N., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Anderson, S., Barna, N., Bastien, V., Bloom, T., Boguslavkiy, L., Boukhqalter, B., Brown, A., Camarata, J., Campoplano, A., Chang, J., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Faro, S., Gordé, S., Gordé, M., Gage, D., Galagan, J., Gardyna, S., Gordé, S., Gordér, M., Graham, L., Grand-Pierre, N., Hagos, B., Horton, L., Hulme, W., Ilev, I., Grand-Pierre, N., Landers, T., Lehocaky, J., Levine, R., Lindblad-Toh, K., Liu, G., MacLan, T., MacDand, P., Major, J., Marquis, N., Matthews, C., MacGanald, P., Major, J., Marquis, N., Matthews, C., Minowa, T., Mlenga, V., Murphy, T., Naylor, J., Naylon, C., Norman, C.H., O'Connor, T., O'Connell, P., O'Neil, D., Oliver, J., Peterson, K., Phukkhang, P., Pierre, N., Pollara, V., Raymond, C., Retta, R., Rieback, M., Riley, R., Schauer, S., Schupback, Roman, J., Rosetti, M., Roy, A., Sance, R., Schauer, S., Schupback, Seaman, S., Severy, P., Spencer, B., Stange-Thomann, N., Stojanovic, N., Stanaus, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J., Zembek, L., Zimmer, A. and Zody, M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AC114677 182029 bp DNA linear HTG 10-JUN-2002 Mus musculus clone RP24-213K19, WORKING DRAFT SEQUENCE, 10 ordered
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
15227 CATACTTGGTTGGAGAAACTATAATTTAGAGATAAGTTATACTTGAAAATTGCATGCCT 15286
                                                                                                                                                                 Db 15347 ------CATGGGCTTTATCCAGGCATGCGA 15370
                                                                                                             268 LeuThrAspSerGluArgGluAsnGluTrpLysTrpLeuAspGlyThrSerProAspTyr 287
                                                                                                                                                                                                                                                                   288 LysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGluAsp 307
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Unpublished
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HTG; HTGS_PHASE2; HTGS_DRAFT; HTGS_FULLTOP.
house mouse.
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Rogov, P., Roman, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schubback, R., Seaman, S., Severy, P., Spencer, B., Stange-Thomann, N., Stojanovic, N., Strauss, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J., Topham, K., Travers, M., Travis, N., Trigilio, J., Young, G., Zalnoun, J., Zembek, L., Zimmer, A. and Zody, M. Direct Submission

L. Submitted (10-JUN-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA On Jun 10, 2002 this sequence version replaced gi:21328559.

All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)

http://ftp.genome.washington.edu/RM/RepeatMasker.html
   Rieback, M., Riley, R., Rise, C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                              Center: Whitehead Institute/ MIT Center for Genome Research Center code: WIBR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        * consists of 10 contigs. Gaps between the contrips

* are represented as runs of N. The order of the pieces

* is believed to be correct as given, however the sizes

* of the gaps between them are based on estimates that have

* provided by the submittor.

* This sequence will be replaced

* by the finished sequence as soon as it is available and

* the accession number will be preserved.

* 52 1051; gap of 100 bp

* 3807 3906: gap of 100 bp

* 3807 3906: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: sequence_submissions@genome.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
Contact project Information
Center project Information
Center clone name: 213_K_19
Consensus quality: 18556 bases at least Q40
Consensus quality: 180723 bases at least Q30
Consensus quality: 180723 bases at least Q30
Consensus quality: 180723 bases at least Q20
Insert size: 1801000; agarose-fp
Insert size: 181129; sum-of-contigs
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NOTE: This is a 'working draft' sequence. It currently
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128411 182029: contig of 53619 bp in length.
Location/Qualiflers
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36938: contig of 19575 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9: gap of 100 bp 17263: contig of 8454 bp in length
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8709: contig of 4803 bp in length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Web site: http://www-seq.wi.mit.edu
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17264 17363: g
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46407 AGCAAAGGATCCAAAGGCTCACAGGGTCCCAAAGGATCTCGTGGGTCCCCAGGGAAGCCT 46466
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         46827 AAAACAGCAGGGACCCTGTGTATCCCTCTGGATGCTTCAGTGCTGTCACTCAGGACCCTG 46886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGly 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLys 177
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                                                                                                                                                                                                                                                                                                                                                           38 PheThrIleLeuGlnGlyProProGlyProArqGlyProArqGlyAspArqGlySerGln 57
                                                                                                                                                                                                                                                                                                                                                                                                             GlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyPro 77
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Mismatches:
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37039. 53226
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981.00
41.25%
38.21%
50.57%
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CCCCTGTACCCCANTACTTCCTTCANGATATTCTACACTCGCTCCTCCCCCCCCCC	203		SOURCE
CCTTCATCTTCTTCTTCTTCTTCTAGATATTCTACACTGGCTGCTCCTCGCCCGCACT 47006  CCTTCATCTTTCTTCTTCTTCTTCTTCTAGAACAGACCATTTTTTTT		.05	ORGANISM
CCTICATCHTCTTCTTCTTCTTCTTCTAGAACAGACATTTTATCAGTTAACTCCACCAGTA 47066	46	CCCCTGTACCCCAAATACTTCCTTCAAGATATTCTACACTGGCTGCTCCCTGACCATCCT	
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HISTEDLYSASDPHETHTAAATCAACAGTTAAAACTTTACATTCCTA-ĠĠĀTĠTĊCĠĊŢ 47545  HISTEDLYSASDPHETHTAAATCAACAGTTAAAACTTTACATTCCTA-ĠĠĀTĠTĊCĠĊŢ 47545  HISTEDLYSASDPHETHTAAPLYSCYSTYTTYPPHESERVALGULUSGUULIEPHEGU 229		AspAsnGlyCysProPro	
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GluGInGinTrpIleLysLysGlnMetValGlyargGlu 262             GAACAGGT-ATGATATGTCAGCACACTTGGTTGGAAAACTATAATTTAGAGATA- 47723            SerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeuAspGly 282     ::	4.7	ASPAJALYSLeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGlu	
ACTIVATED AT A TOTAL A		GluGlnGlnTrpIleLysLysGlnMetValGlyArgGlu	
SerHisTrpileGlyLeuThrAspSerGluAsnGluTrpLysTrpLeuAspGly 282     ::: ACTTATACTTGGAAATTGCATGCCTTTGAGAGATCAAA	47		
ACTOZE18  ACTOZE		SerHisTrp1leGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeuAspGly	TITLE
ThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHis 302	47	AGTTATACTTGGAAATTGCATGCCTTTGAGAGTCAAAGAGATCAAA	JOURNAL
GlyProGlyGluAspCysAlaGlyLeulleTyrAlaGlyGlnTrpAsnAspPheGGlyProGlyGluAspCysAlaGlyLeulleTyrAlaGlyGlnTrpAsnAspPheGAGGAAGGCTGCAGTTTGCATGTTTTCCAGGTATGAGAGTATATGAATGA		ThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHis	COMMENT
GlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPheG	47	AATTCATGGTCTCATAAACAA	
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AC102618 193208 bp DNA linear HTG N Mus musculus clone RP23-426G16, WORKING DRAFT SEQUENCE,	47	AGGAAGGCTGCAGTTTGCATGGGCTTTTTCCAGGTATGAGAGTATATGAATTATAAAA	
	LT S S NI	AC102618 193208 bp DNA linear HTG Mus musculus clone RP23-426616, WORKING DRAFT SEQUENCE,	

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A litton L. Juszobo)

Jurren, B., Lintton L. Juszobo)

Jurren, B., Lintton L. Juszobo)

Jurren, B., Lintton L. Juszatun, R. Bastlen V. Boguslawkyy. L. Bouchgalter. B.,

Judepel, Y. Colangelo, M. Callins, S., Collymore, A., Cook, A.,

Cooke, P., Dearellano, K., Dear, S., Collymore, A., Cook, A.,

Cooke, P., Dearellano, K., Dear, S., Collymore, A., Cook, A.,

Cooke, P., Fitzhedh, W., Caga, D., Galagan, J., Gard, Pierre, N.,

Jinde, S., Gord, S., Goyette, M., Thalme, W., Illay, I., Johnson, R.,

Junes, C., Kanard, A., Kartas, A., Kells, C., Levine, R., Liu, G.,

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Accarthy M., Macdonald, P., Major, J., Marquis, N., Matthews, C.,

Accarthy M., Macdonald, P., Major, J., Marquis, N., Matthews, C.,

Accarthy M., McKernan, K., NoPheeters, R., Meldrin, J.,

Accarthy M., McKernan, K., NoPheeters, R., Meldrin, J.,

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Accarthy M., McKernan, R., NoPhour, R., Pollara, V.,

Baymond, C., Norman, C. H., O'Connor, T., O'Connor, T.,

Johnson, S., Severy, P., Spencer, B., Stange-Thomann, N., Stolanovic, N.,

Jiver, J., Peterson, R., Phunkhang, P., Pierre, N., Pollara, V.,

Jiver, J., Severy, P., Spencer, B., Stange-Thomann, N., Stolanovic, N.,

Jicet, Subramanian, A., Talanas, J., Tessiay, R., Massillev, H.,

Jieret, Submission

Jirect, McCarly, W., Wassiller, H.,

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Jodges, J., Johnson, R., Johnson, R., Jones, C., Kamat, A.,

Jock, A., Cord, S., Carlam, L., Johnson, R., Jones, C., Kamat, A.,

Jock, M., Colonnell, P., W
                                                                                                                                                       yota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostoml;
lia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tted (21-AUG-2002) Whitehead Institute/MIT Center for Genome rch, 320 Charles Street, Cambridge, MA 02141, USA g 21, 2002 this sequence version replaced g1:17061704.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      enter: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      epeats were identified using RepeatMasker:
A.F.A. & Green, P. (1996-1997)
//ftp.genome.washington.edu/RM/RepeatWasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ontact: sequence_submissions@genome.wi.mit.edu
------ Project Information
618.2 GI:22381604
HTGS_PHASE1; HTGS_DRAFT; HTGS_FULLTOP.
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                                                                                                                                                                                                                                                                  n, B., Nusbaum, C. and Lander, E. usculus, clone RP23-426G16
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98360 GGACCACCTGGCCCTCCAGGCCCCTCAGGAGCAATGGAGCCATTGGCTCTGCAGAATGAA 98419
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                                                                                                                                      PheThrIleLeuGlnGlyProProdlyProArgGlyProArgGlyAspArgGlySerGln
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                     Conservative:
                                     Mismatches:
Indels:
                                                                                                      US-09-763-712A-2_COPY_206_547 (1-342) x AC102618
     Matches:
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   981.00
41.25%
38.21%
50.57%
                Percent Similarity:
Best Local Similarity:
Query Match:
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                                                                                                                                                      NOTE: This is a 'working draft' sequence. It currently consists of 11 contigs. The true order of the pieces is not known and their order in this sequence record is
Assembly program: Phrap; version 0.960731
Consensus quality: 190144 bases at least Q40
Consensus quality: 191397 bases at least Q30
Consensus quality: 191862 bases at least Q20
Insert size: 198000; agarose-fp
Insert size: 19208; sum-of-contigs
Quality coverage: 8.8 in Q20 bases; sum-of-contigs
Quality coverage: 9.1 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                              9035 9134: gap of 100 bp 9135 74024: contig of 64890 bp in length 74125 88784: contig of 14660 bp in length 88785 88884: gap of 100 bp 88885 939 of 18566 bp in length 107451 107550: gap of 100 bp 100 bp 10751 127842: contig of 20292 bp in length 107551 127842: contig of 20292 bp in length
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1314 3101: contig of 1788 bp in length
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TTTAC 98959	TCTGT 99019	203	rgcrg 99079	203	CATTG 99139	203	GCAGG 99199	ropro 209        cccr 99258	heglu 229        TTGAA 99318	rgGlu 249          GGGAA 99378			spGly 282	1JyHis 302 AACAA 99505	heGln 321	:::  TCAAA 99565	HTG 09-SEP-2000 WORKING DRAFT  Euteleostomi; Homo.  1., Anderson, M., oukhgalter, B., min, L., Boyle, M., t, D., t, A., Horton, L., t, A., Klein, J., t, S., N.,	drim,J.,
GTGTGGGTCCCTCATGCTGGTCCACAAGCCAGACTTTGGTTCTGAAGTGTGCTTATTTAC	98960 AACCTCCAGCCGATCCAAGCCGACAGTGTATCAGAACCCACCC		CGTCATAAAGCCTAGCCCAACCCAGTCCCACTTTCTTCACTGTGTGTG		TGTGCTGTACAGTCCAACATCTGAGAACATCTGCCCGGGTTCTACACAGGGACACCCATTG		GCATGCAAGTGGTACAAGGCTGTGACTTTGATATCTTAAACACAGCTGAGGAAATGCAGG	GTTCCTTCTGTGTTTTTAAATCAACAGTTAAAACTTTACATTCCTA-GGATGTCCGCCT	HisTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGlu 	AspalaLysLeuPheCysGluaspLysSerSerHisLeuValPheIleAsnThrArgGlu 	GluGlnGln	:ACTTGGTTGGAGAAACTATAATTTAGA	ScrHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeuAspGly     ::     :: AGTTATACTTGGAAATTGCATGCTTTGAGAGTGAAAGAGATCAAA	ThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHis ::::::	GlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPheGln	AGGAAGGCTGCAGTTTCCATGGGCTTTTTCCAGGTATGAGAGTATATGAATGA	ACO16128  LG9088 bp DNA linear HTG 09-SEP-200 SEQUENCE, 8 unordered pieces. ACO16128 ACO17ACO17ACO ACO16128 ACO	<pre>(ernan, K., McLaughlin, J., Mel</pre>
GTGTGGGTCCCTCATGCTGGTCCACAA	AACCTCCAGCCGATCCAAGCCGACAG		CGTCATAAAGCCTAGCCCAACCCAGT		TGTGCTGTACAGTCCACATCTGAGAA(		GCATGCAAGTGGTACAAGGCTGTGAC	GTTCCTTCTGTGTTTTTAAATCAAC	HisTrpLysasnPheThraspLysCys 	AspalaLysLeuPheCysGluAspLys 	GluGlnGln	GAACAGGI-AIGAIAIGICAGCIGCAG	SerHisTrpileGlyLeuThrAspSerGluArgGluAsnGluTrpLys    ::: 	Thr Ser ProAspTyr LysAsnTrpLys			ACO16128 Homo sapi, SEQUENCE, ACO16128. ACO16128. ACO16128. HTG; HTGS; HTGS; HOMO sapi, E HOMO sapi, Dupublish 2 (bases Birren, B. Baldwin, J. Brown, A., COOKE, P., Ferreira, I. Howland, J. How	McEwan, P., McGurk, A., McF
Db 98900 Qy 203	09686 qa	Qy 203	DP 99020	Qy 203	08066 qa	Qy 203	Db 99140	Oy 204 Db 99200	Qy 210 Db 99259	Oy 230 Db 99319	Oy 250	ע א	Qy 263 Db 99437	Qy 283 Db 99485	Qy 303	Db 99506	RESULT 13 ACO16128/C LOCUS DEFINITION ACCESSION VEEXWORDS SOURCE ORGANISM AUTHORS TITLE JOURNAL REFERENCE AUTHORS AUTHORS	•

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Peterson, K., Pollara, V., Riley, R., Koy, A., Santos, R., Severy, P., Stange-Thomann, N., Stojanovic, N., Subramanian, A., Talamas, J., Tesfaye, S., Tirrell, A., Vassillev, H., Vo, A., Wheeler, J., Wu, X., Wyman, D., Ye, W. J., Zimmer, A. and Zody, M.

Direct Submission
Submitted (20-NOV-1999) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://fep.genome.washington.edu/RM/RepeatMasker:html
                                                                                                                                                                                                                                                                                                                                                                     Center: Whitehead Institute/ MIT Center for Genome Research
forrow,J., Naylor,J., Norman,C.H., O'Connor,T., O'Donnell,P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOTE: This is a 'working draft' sequence. It currently consists of 8 contigs. The true order of the pleces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Center clone name: 324_G_2
Sequencing vector: M13; M77815; 100% of reads
Sequencing vector: M13; M77815; 100% of reads
Chemistry: Dye-terminator Big Dye; 100% of reads
Assembly program: Phrap; version 0.960731
Consensus quality: 167522 bases at least Q40
Consensus quality: 167946 bases at least Q30
Consensus quality: 167946 bases at least Q30
Consensus quality: 167996 bases at least Q30
Insert size: 177000; agarose-fp
Insert size: 168388; sum-of-contigs
Quality coverage: 6.2 in Q20 bases; sum-of-contigs
Quality coverage: 6.5 in Q20 bases; sum-of-contigs
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/clone_lib="RPCI-11 Human Male BAC"
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120970 169088: contig of 48119 bp
Location/Qualifiers
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38195. 49220
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .169088
/organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vector_side:left"
18044. .22424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /chromosome="18"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91693 91792; gap of
91793 120869; cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         clone_end:SP6
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Db 153230 -TGTTTTTGTTTTGAGACAGGGTCTCACTCTGTT	290 pLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGl	Db 153132 CAAGTGATTCTCCTGCCTTAGCCTCCCAGGTAGCTGGACTACAAGCGTGTGCCCCCACA 153073  Qy 306 uAspCysAlaGlyLeulleTyrAlaGlyGlnTrpAs 318  i :         : : : : :         : : : : :	1321 nCysGlu 323 152952 GTGTGAG 152946	RESULT 14 AP000915/c LCCUS AP000915 DEFINITION Homo sapiens genomic DNA, chromosome 18p clone:RP11-720L2, complete	sequences. ION AP000915 N AP000915.5 G DS HTG.	SOURCE Homo sapiens DNA, clone:RP11-720L2. ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	REFERENCE 1 AUTHORS 1attori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P., Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y. TITLE Homo sapiens genomic DNA	RS	TITLE Direct Submission JOURNAL Submitted (17-DEC-1999) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan	(E-mail:ha Tel:81-45- On Apr 26,	source 1188439 /organis="Homo sapiens" /db_xref="taxon:9606" /chromosome="18"	/map="18p" /clone="RP11-720L2" BASE COUNT 54003 a 41134 c 40027 g 53275 t ORIGIN	Alignment Scores: 9.17e-24 Length: Pred. No.: 954.50 Matches:	Percent Similarity: 58.40% Conservative: 21 Best Local Similarity: 52.62% Mismatches: 53 Query Match: 49.20% Indels: 9 DB: 9	US-09-763-712A-2_COPY_206_547 (1-342) x AP000915 (1-188439)
misc_feature 4932166394 misc_feature 6649591692 misc_feature 6649510869 misc_feature 7/note="assembly_fragment" misc_feature 120970169088 //note="assembly_fragment" //note="assembly_fragment" //note="assembly_fragment" //note="assembly_fragment" //note="assembly_fragment"	vector_side:right" BASE COUNT 48103.a 33537 c 34088 g 52660 t 700 others ORIGIN	Alignment Scores: 8.52e-24 Length: 169088 Pred. No.: 852e-24 Length: 169088 Score: 554.50 Matches: 191 Percent Similarity: 58.40% Conservative: 21 Best Local Similarity: 52.62% Mismatches: 53 Query Match: 2 Gaps: 8	109-763-712A-2_COPY_206_547 (1-342) x AC016128 (1-169088) 16 AsnLeuSerVallleMetGluGluMetLysLeuValAspSerLysHisGlyGln	DD 153903 MATITIGGAGGATTTTATAGGAGGAGGAGTTCATAGCTATCATAGGTGGGTTTCAT 153844  Qy 34 LeuileLysAsnPheThrileLeuGlnGlyProProGlyProArgGlyProArgGlyPsp 53  1::	Qy 54 ArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGly 73 (	Qy 74 GlubroGlyProProGlyProAlaGlyGluargGlyProIleGlyProAlaGlyProPro 93	Qy 94 GlyGluargGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySer 113 	Qy 114 ProGlyLysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGly 133	Oy 134 LysGluGlyLeuProGlpGlyProBroGlyProProGlyPheGlnGlyLeuGlnGlyThrVal 153 	Qy 154 GlyGlubroGlyvalProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMet 173 	Qy 174 ProGlyProLysGlyProProGlyProProGlyProSerGlyAlaValValProLeuAla 193	Qy 194 LeuGlnasnGluProThrProAlaProGluAspasnGly	Qy 207Cyspro-Prohi 210   11   111   111   Db 153303 CCAGGGGAACAGGCAGTGCTTGAGACTGAGCCAACCCCCAGTGTGTGGCCCA 153244	Qy 210 sTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGluAs 230	Qy 230 pAlaLysLeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGl 250

Oy Dp	16 AS    45024 AA	AsnLeuSerVallleMetGluGluMetLysLeuValAspSerLysHisGlyGln 33         :::::           AATTTGGAGATTTTATAAGAAAAATTATTCATAACTATCATTCACAGTGGATTTCAT 44965
Oy Dp	34 Le :: 44964 GT	LeulleLysasnPheThrIleLeuGlnGlyProProGlyProargGlyProargGlyAsp 53 ::: GTTGACACCTTTTTTTTTTTTTTTGGTTCCACCGGGCCCCAGGGGTCCAAGAGGTGAC 44905
O.Y	54 Ar     4904 AG	ArgalyserginglyproproglyprothrdlyasnLysglyglnlysglyglulysgly 73 
Oy Db	74 G1   1 44844 GA	Glubroglyproproglybroalaglygluargglyprolleglyproalaglypropro 93 
Oy Dp	94 G1 11 44784 GG	GlyGluargGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySer 113 
oy Dp	114 Pr    44724 CC	ProglyLysProglyProglnGlyProSerGlyAspProGlyProProGlyProProgly 133 
Qy Dp	134 LY    44664 AA	LysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrVal 153 
Qy	154 G1     4604 GG	GlyGluProGlyValProGlyProArgGlyLeuProGlyVeuProGlyValProGlyWet 173 
oy Op	174 Proc         44544 CCAC	:oGlyProLysGlyProProGlyProSerGlyAlaValValValProLeuAla 193 
g 3	194 Leu(      4484 CTG	euGlnAsnGluProThrProAlaProGluAspAsnGly
oy D	207	CCAGGGGAACAGGGCAGTGCATGATGAACTGAACTCCAAATGTGTTGAACTGAACTCCAAATGTGTTGAAGTGAACTCAAATGTGTTGAAGTGAACTCAAATGTGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTGAAATGTAAATGTAAATGTGAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAATGTAAA
γο	210	LysAsnPheThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGluAs 230
70	230	aLysLeuPheCysGl
අ දි	44351 -TG 250 uGl	GT VS
QQ	44313	44
Oy Dp	270 ps : 44312 -G	SerGluArgGluAsnGluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTr 290 ::::::
S G	290 pL :1 44253 CA	PLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGl 306 
Oy Dp	306 uA	AspCysAlaGlyLeuIleTyrAlaGlyGln
Oy Dp	318 n- ; 44133 TC	CAAACTCCTGGCCTCAAGTGATCCACCTAGTCTCCCAAAGTGCTGGGATTACAG 44074
δλ	321 nCy	ysglu 323

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Dipublished

Sirren, B., Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N., Badess 1 to 71044)

Sanderson, S., Baddwin, J., Barna, N., Beda, F., Boquslavkly, L., Boukhgalter, B., Brown, A., Burkett, G., Campopiano, A., Castle, A., Chopel, Y., Colangelo, M., Collins, S., Collymore, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S., Domino, M., Doyle, M., Ferreira, P., FitzHugh, M., Forrest, C., Gage, D., Galagan, J., Gardyna, S., Ginde, S., Goyette, M., Graham, L., Grant, G., Hagos, B., Heaford, A., Horton, L., Howland, J.C., Illev, I., Johnson, R., Johnson, R., Johnson, R., Heaford, A., Horton, L., Karatas, A., Klein, J., Landers, T., Largocque, K., Lehoczky, J., Levine, R., Lieu, C., Liu, G., Locke, K., Macdonald, P., Marquis, N., McCarthy, M., McEwan, P., McCurk, A., McKernan, K., McHerters, N., Meldrim, J., Meneus, L., Mihova, T., Miranda, C., Malenga, V., Morrow, J., Naylor, Peterson, K., Pistar, C., Pollara, V., Raymond, C., Riley, R., Rogov, P., Rothman, D., Roy, A., Santos, R., Schauer, S., Severy, P., Spencer, P., Stenk, T., Talamas, J., Tesfaye, S., Theodore, J., Tirrell, A., Travers, M., Trigilio, J., Vassiliev, H., Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J., Zinmer, A. and
                                                                                                                                                                                                               ACU24368 71044 bp DNA linear HTG 28-FEB-2000
Homo sapiens chromosome 11 clone RP11-179K3 map 11, LOW-PASS
SEQUENCE SAMPLING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryotta: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. [ tbases 1 to 71044 ]

Birren, B., Linton, L., Nusbaum, C. and Lander, E. Homo. sapiens chromosome 11, clone RP11-179K3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (28-FBB-2000) Whitehead Institute/MIT Center for Genome
Submitted (28-FBB-2000) Whitehead Institute/MIT Center for Genome
Research, 320 Charles Street, Cambridge, MA 02141, USA
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOTE: This record contains 90 individual sequencing reads that have not been assembled into contigs. Runs of N are used to separate the reads and the order in which they appear is completely arbitrary. Low-pass sequence sampling is useful for identifying clones that may be gene-rich and allows overlap relationships among clones to be deduced. However, it should not be assumed that this clone will be sequenced to completion. In the event that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
------ Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the record is updated, the accession number will
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           699 798: gap of 100 bp 1495: contig of 697 bp in length 1496 1595: gap of 100 bp 1596 2284: contig of 689 bp in length 100 bp 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Center project name: L6145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center clone name: 179_K_3
                                                                                                                                                                                                                                                                                                                                                                                                                                               AC024368
AC024368.1 GI:7108157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HTG; HTGS_PHASEO.
Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished
:||||||
Db 44073 GTGTGAG 44067
                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
REFERENCE
AUTHORS
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JOURNAL
                                                                                                                                                                 RESULT 15
                                                                                                                                                                                                                          AC024368
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10 23709; gap of 100 bp 24402; contig of 693 bp in length 103 24502; app of 100 bp 100 bp 25191; contig of 689 bp in length 102 25291; gap of 100 bp 102 25981; contig of 690 bp in length 102 25741; contig of 693 bp in length 103 256774; contig of 693 bp in length 103 26774; contig of 699 bp in length 103 256774; contig of 699 bp in length 103 27563; contig of 689 27563; c
                                                                                                                  100 bp
of 682 bp in length
100 bp
100 bp in length
100 bp in length
of 701 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21324: gap of 100 bp 22017: contig of 693 bp in length 2217: gap of 100 bp 22815: contig of 698 bp in length 22915: gap of 100 bp 23609: contig of 694 bp in length
                                                                                                                                                                                                                                                               )0 bp
684 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                     10240: gap of 100 bp
10922: contig of 682 bp in length
11022: gap of 100 bp
11709: contig of 687 bp in length
11809: gap of 100 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13404; gap of 100 bp 14095; contig of 691 bp in length 14195; gap of 100 bp 14881; contig of 686 bp in length 14981; gap of 100 bp 15674; contig of 693 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18836: contig of 696 bp in length
18936: gap of 100 bp
19621: contig of 685 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29245: gap of 100 bp
29943: contig of 698 bp in length
                                                                        of 100 bp contig of 676 bp in length
                                                                                                                                                                                                                                                                                                              100 bp
f 682 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                             2: gap of 100 bp 11140: contig of 688 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          p of 100 bp contig of 693 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    p of 100 bp contig of 686 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 o of 100 bp contig of 690 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o of 100 bp contig of 690 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20525; gap of 100 hn length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     p of 100 bp contig of 699 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         p of 100 bp contig of 692 bp in length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30845: gap of 100 bp 31535: contig of 690 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   contig of 702 bp in length
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-Q=Cqqqq1_2/V2PFO_EXPO_FX050763112/runat_14032003_100949_18091/app_query.fasta_1.1877
-LOSPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DGCALIGN=200 -THE_SCOREE=CT -THR_MAX=100 -THR_MING -ALIGN=15
-USFR=45 -DGCALIGN=200 -THR_SCOREE=CT -THR_MAX=100 -THR_MING -ALIGN=15
-USFR=0509763712_eCGN_1 1_626_erunat_14032003_100949_18091 -NCPU=6 -ICPU=3
-NON_ELCAL -DU_MMAP -LARGEDUERY -RGC_SCORES=0 -WAIT -LONGLOG -DEV_TIMEOUT=120
-WARN_TIREOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
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4293.470 Million cell updates/sec
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                                                                                                                                  ; Search time 179.385 Seconds
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                                                                                       - nucleic search, using frame_plus_p2n model
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New collectin of human origin having antibacterial and antiviral activity, and gene encoding it useful for production of transgenic animals and of antibodies for screening potential drug molecules .
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The invention relates to polynucleotides encoding a new collectin of human origin. The collectin can be used as an antibacterial and antiviral agent and for screening potential drug molecules. The new collectin can be produced by standard recombinant methodology. The present sequence represents a DNA encoding the human collectin.
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Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; hamemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokantic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                      2194 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
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                                                                                                      Human; scavenger; receptor; diagnosis; treatment; autoimmune disease; rheumatoid arthritis; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein is useful as a target molecule for diagnosis, prevention and treatment of autoimmune diseases such as rheumatoid arthritis.
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                                                                    Human scavenger receptor-like protein encoding cDNA
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Matches:
Conservative:
Mismatches:
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Best Local Similarity:
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ABA97932
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                                                                                                                          Wang
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                                                                                                                          Ren F,
Zhang J;
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Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                        548 G; 504 T; 0 other;
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Mismatches:
                                                                                                                       Liu C, Asundi V, Chen R, Ma Y,
Wang Z, Wehrman T, Xu C, Xue AJ,
Zhou P, Goodrich R, Drmanac RT;
                                                                                                                                                                                             Novel nucleic acids and polypeptides, useful such as central nervous system injuries -
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Matches:
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                          09-JUL-2000; 2000US-0598042.
19-JUL-2000; 2000US-0620312.
03-AUG-2000; 2000US-0653450.
14-SEP-2000; 2000US-0662191.
19-OCT-2000; 2000US-063336.
29-NOV-2000; 2000US-0727344.
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P-PSDB; AAM39686.
                                                                                                    (HYSE-) HYSEQ INC.
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Best Local Similarity:
Query Match:
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         21-JAN-2000;
25-APR-2000;
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Wang J, W
Zhao QA,
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
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963 TCTAAAAGGCTCCCAAGGCCCCAAAGGCTCCCGTGGGAAGCCCCGGCCCTCAG
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                                                                                                                                    GlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGly
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74..2302
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Human; angiogenesis; PRO protein; cardiovascularisation; wound; cancer; atherosclerosis; cardiac hypertrophy; gene therapy; endothelial disorder; cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; gene; ss.
 TITICAGITGAGAAAGAAAITITITGAGGAIGCAAAGCITITICIGIGAAGACAAGICITCA 1993
                                                                                                                                                                                                                                    2234 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT 2293
                                                                     GlnCysGluAspValAsnAsnPheIleCysGluLysAspArgGluThrValLeuSerSer
                                ProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro
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2000US-220664P.
2000US-22064P.
2000WO-US20710.
200UUS-0643657.
2000WO-US23522.
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                                                                                                                                                              New Scavenger receptor proteins SRCL-PI with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
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Matches:
Conservative:
Mismatches:
Indels:
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                                       2001WO-JP00874
                                                                    2000JP-0309068
                                                          2000JP-0035155
                                                                                         (FUSO ) FUSO PHARM IND LTD.
                                                                                                                                WPI; 2001-497076/54.
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                                                                                                                                           P-PSDB; AAG63346
WO200159107-A1.
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                    16-AUG-2001
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MetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIle ATGCAACAAGATTTGATGAGGTCGAGGTTAGACACTGAAGTAGCCAACTTATCAGTGATT

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US-09-763-712A-2\_COPY\_206\_547 (1-342) x ABL95574 (1-2005)

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Conservative: Mismatches: Matches:

2.57e-58 1934.00 99.718 99.718

Percent Similarity: Best Local Similarity: Query Match:

No.:

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Length:

Indels:

Gaps:

597

LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro GlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProJPro GGCCCAACTGGCAACAAGGGACAGAAAGGAGAGAGAGGGGGGAGCCTGGACCACCTGGCCCT

538

7

598 61 658

41

MetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIle

40

657

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717

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The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atheroscierosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, myocardial infarctions, thrombophiabitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Paoni NF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   healing. The present sequence is a coding sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerber H, Gerritsen ME, Goddard A;
,, Hillan KJ, Marsters SA, Pan J,
.K, Williams PM, Wood WI, Ye W;
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                                                                                                                                                                                                                                    10-MAY-2001; 20010S-0854208.
10-MAY-2001; 20010S-0854280.
25-MAY-2001; 20010S-0866028.
25-MAY-2001; 20010S-0866034.
30-MAY-2001; 20010S-0876033.
30-MAY-2001; 20010S-087674.
                                2000US-0664610
2000US-0665350.
2000US-242922P.
2000US-0709238.
2000WO-US30952.
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2001US-0802706.
2001US-0808689.
2001US-0818744.
2001US-0828366.
2001US-0824208.
2001US-0854280.
                                                                                                       2000WO-US32678
2000US-0747259
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20-JUN-2001; 2001WO-US19692
28-JUN-2001; 2001WO-US00000
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2001US-0767609
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                      2000US-000000P
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Watanabe CK,
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GURNEY A L.
HILLAN K J.
MARSTERS S A.
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STEPHAN J F.
WATANABE C K.
WILLIAMS P M.
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FERRARA N.
                                                                                                                                                                                                                                                                                                                                                                                                         GERBER H.
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                   15-SEP-2000; 2
18-SEP-2000; 2
24-OCT-2000; 2
08-NOV-2000; 2
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20-BCC-2000; 2
22-DEC-2000; 2
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22-MAR-2001; 2
05-APR-2001; 2
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HisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLysLysGlnMetValGly
                                                                       CATCTTGTTTTCATAAACACTAGAGAGAACAGCAATGGATAAAAAAACAGATGGTAGGG
                                                                                                                             GlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPhe
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Alignment Scores:

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161 928 GlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGluProThrPro

181

GlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGly

200

180

160

957

120

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AlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGluArgGlyGlyLysGly 100

81

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SerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysProGlyProGln

TCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCCTGGGAAGCCCGGCCCTCAG

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161 ProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro 180
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                 Stephan JF,
  Baker KP,
         Godowski
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                                                                                                                                                 vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; angiogenic disorder; cardiac hypertrophy; atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; rheumatodi arthritis; myocardial infarction; thrombophlebitis; lymphangitis; tumour angiogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; gene; ss.
                                                                                                                                            hypotensive;
                1497
 340
antiangiogenic;
                                                                                                                                           angiogenesis; cardiant; cytostatic;
                                                                                                                          Human PRO7223 cDNA sequence SEQ ID NO:27.
                                                                            ABL88085 standard; cDNA; 2005 BP.
                                                                                                                                                                                                                                                                                                                         2000US-0643657.
2000WO-US23522.
2000WO-US23328.
2000US-230978P.
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ABER8072 to ABER8258 encode the PRO proteins given in ABB84817 to ABER85003. The PRO proteins and polynucleotides have cardiant, cytostatic, antianglogenic, hypotensive, vulnerary and antiarteriosolerotic activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angingenic disorder in a mammal,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   e.g. cardiac hypertrophy, trauma, cancer, age-related macular chemacial hypertrophy, trauma, cancer, age-related macular chemacion, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, amgina, myocardial infarctions, thrombophlebitis, lymphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABLB8259 to ABL88257 represent primers and probes used in the exemplification of the present invention.
                                                                                                                                                                     One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     537
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                         Paoni NF;
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Ye W;
  Goddard A;
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                    Marsters SA,
1, Wood WI,
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Mismatches:
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  Gerritsen ME,
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Gerber H, Gerrits
J, Hillan KJ, Mar
JK, Williams PM,
                                                                                                                                                                                                                                                                      Claim 2; Fig 27; 565pp; English.
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                    PJ, Gurney AL,
JF, Watanabe CK,
  Ferrara N,
                                                                                               2002-090516/12.
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Best Local Similarity:
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                                                                                   GlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGluProThrPro
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM3642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system diseases, such as localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and CRAS disconces.
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                       Ma Y,
Xue AJ,
                                                 Goodrich R, Drmanac RT;
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                     Chen R,
                                     Xu C,
                       Asundi V,
Wehrman T,
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                       Liu C, P
Wang 2, V
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(HYSE-) HYSEQ INC.
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The present invention provides the protein and coding sequences for 25 novel extracellular matrix and adhesion-associated proteins (EXMADS). These are designated EXMAD-1, EXMAD-2, EXMAD-1, EXMAD-5, EXMAD-1, EXMAD-2, EXM
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Mismatches:
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Best Local Similarity:
P-PSDB; AAB27236
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protein;
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1811
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                                                                                                                                                            241 HisLeuValPheIleAsnThrArgGluGluGluGlnGlnTrpIleLysLysGlnMetValGly
                                                                                                                   ArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeu
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Spaulding V;
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                                                                                                                                                                                                                                                                                                                                                        ABQ92072 standard; cDNA; 2929 BP.
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Treacy M,
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LAVALLIE E R.
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SPAULDING V.
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MERBERG D.
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Merberg I
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AlaGlyGluArgGlyPro1leGlyProAlaGlyProProGlyGluArgGlyGlyLyLySGly 100

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1266 ATGCAACAAGATTTGATGATGAGGTCGAGGTTAGACACTGAAGTTAGATGAGTT 1325

1 MetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIle

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US-09-763-712A-2\_COPY\_206\_547 (1-342) x ABQ92072 (1-2929)

Conservative: Mismatches: Matches: Length:

3.33e-58 1934.00 99.71% 99.71%

Percent Similarity: Best Local Similarity:

Query Match:

Alignment Scores:

Indels:

Sequence 2929 BP; 901 A; 699 C; 692 G; 637 T; 0 other;

1326 AIGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTATACAATA 1385

MetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIle

21

41 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro 

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The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (CDNA) inserts (II), where the protein is substantially free from cher mammalian proteins. (I) are useful for preventing, treating or other mammalian proteins. (I) are useful for preventing, treating or prevention of tumours. (I) exhibits activity relating to angiogenesis, crytokine, cell proliferation, call differentiation, antihilammatory, stem cell growth factor activity and activin or inhibin-related crytokine, cell growth factor activity and activin or inhibin-related crise to neuroepithelial cells that can be used to augment or replace crise to neuroepithelial cells that can be used to augment or replace crise to neuroepithelial cells that can be used to augment or replace crise to neuroepithelial cells that can be used to augment or replace crise to neuroepithelial cells that can be used to augment or replace crise to neuropathelial cells that can be used to augment or replace crise to neuropathelial substances and neuropathies, such as altabase and peripheral nervous system diseases and neuropathies, such as Alzheimer's Parkinson's disease, Huntington's disease, amyotrophic crise activity, requilation of hammatopolesis and is useful for the treating osteoporosis, plateled disorders such as thrombocytopaenia or lymphoid cell disorders, plateled disorders such as thrombocytopaenia criseus growth and in tissue repair, healing of burs, incistons, ulcers, for treating osteoporosis, osteoarthritis, bone degeneration or cregeneration and treamment of lung or liver fibrosis, reperfacions, ulcers, regenerating osteoporosis, osteoarthritis, bone degeneration and treamment of lung or liver fibrosis, reperfacions or regeneration and treamment of lung or liver fibrosis, reperfacions and conditions, autoimmune disorders e.g. multiple scilencies and disorders include disbetes mellitus, myasthenia gravis, allergic reactions and conditions, sequence is that of a polynucleot
                                                                                                            Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
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                     WPI; 2002-582343/62.
P-PSDB; ABP61859.
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activin/inhibin; chemokinesis; haemostasis; thrombolysis;
receptor/ligand activity; anti-inflammatory; tumour inhibitor;
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                                                                                                                                                                                                                                                                                                                              2106 GATGGGACATCTCCAGACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCAT
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                                                                                              GlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGly
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human secreted protein clone bv227_1 coding sequence.
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Location/Qualifiers

Key

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This sequence encodes a human secreted protein of the invention.

This DNA sequence was isolated from a human adult brain CDNA

This DNA sequence was isolated from a human adult brain CDNA

This DNA sequence was isolated from a human adult brain CDNA

Ilbrary, and was designated clone bv22_1. The DNAs and proteins

suitable for treating, preventing or ameliorating medical conditions in
humans and animals, although no supporting data is given. Suggested
cutivities include nutritional sources or supplements, immune

stimulating or suppressing activity, haematopoiesis regulating activity,
clemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
invasion suppressor activity, and tumour inhibition activity. The DNAs
invasion suppressor activity, and tumour inhibition activity. The DNAs
invasion its subfragments and variants is useful for recombinant
production of the human secreted protein clones.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New polynucleotides encoding secreted human proteins - derived from human foetal brain, adult brain, foetal kidney, adult ovary, adult retina, adult placenta or adult uterus cDNA libraries
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Mismatches:
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Treacy M;
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970S-0868900.
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P-PSDB; AAW73628.
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McCoy JM,
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arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
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Best Local Similarity:
Query Match:
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10-OCT-2000;
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                                                               2226 CAATGTGAAGACGTCAATAACTTCATTTGCGAAAAAGACAGGGAGACAGTACTGTCATCT
                                                         SerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysProGln
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The present sequence encodes a human scavenger receptor, designated SRCL-11. The SRCL-P1 polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, diabetic complications, bacterial infection and restenosis following angioplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SRCL-P1 with collectin-like structure, sis of diseases associated with oxidized
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                                                                           Location/Qualifiers 92..2320 ,/*tag* a
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low density lipoprotein;
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                                                                                                                                                                                                                                                                                                                                                        Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder; ss.
                                                                                                                                              AspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHis
                                                                                                                                       PheSerValGluLysGlullePheGluAspAlaLysLeuPheCysGluAspLysSerSer
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                                                                      ProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProPro
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The invention relates to isolated polynucleotide (I) and probes, polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The cand gene mapping, and in recombinant production of (II). The polymerleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or application apply perture in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in disorders for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and anino acid sequences. AASAG197-AASAG154 represent novel human call acquence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at the invipo.int/pub/published_pct_sequences.
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                                            GlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyPro 176
                                                                      LysGlyProProGlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsn 196
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                   LeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluPro
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The present sequence encodes a human scavenger receptor, designated SRCL-PI. The SRCL-PI polypeptide has a collectin-like structure. They are useful in clarifying the functions of macrophages and basal immunity. They are also useful in the treatment, prevention, diagnosis and investigation of diseases such as arteriosclerosis, dlabetic complications, bacterial infection and restenosis following angloplasty, which are associated with accumulation of oxidized low density lipoprotein and the binding of advanced glycation end-products into
                                                                                                                                                                                                                                                              New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
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Mismatches:
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Matches:
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2000JP-0309068.
                                                                                 (FUSO ) FUSO PHARM IND LTD
                                                                                                                                                                                    2001-497076/54.
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14-FEB-2000;
10-OCT-2000;
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                                                                                                                                   Wakamiya N;
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PS Claim 6; Page 142-150; 175pp; Japanese.  XX CC This sequence encodes the human cellular stress response 3 (CSR3) protein CC of the invention. The CSR proteins are macrophage scavenger receptor CC of the invention. The CSR proteins can be used in the treatment, gene therapy CC and diagnosis of diseases in which intracellular stress is important, c. such as arteriosclerosis, diabetic circulatory obstruction, and microbial CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the proteins is induced in vivo in response to CC infection. Expression of the CC infection in the CC		Qy         45 ProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGly 64	0y 73 GlyGlubroGlyProAlaGlyGluArgGlyProlleGlyProAlaGlyPro 92   111:::
Db   1516	Oy 281 AspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHis 300	Oy 321 GlnCysGluAspValAsnAsnPheIleCysGluLysAspArgGluThrValLeuSerSer 340	RESULT 14  AAX27858  AXX7858  XX  AXX27858;  AXX7858;  AXX7858;  DT

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This sequence encodes the human cellular stress response 1 (CSR1) protein of the invention. The CSR proteins are macrophage scavenger receptor proteins. The CSR proteins can be used in the treatment, gene therapy and diagnosis of diseases in which intracellular stress is important, such as arteriosclerosis, diabetic circulatory obstruction, and microbial infection. Expression of the proteins is induced in vivo in response to intracellular stress, and inhibits cell death as a result of such stress.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1650 CCCGGCCCTCCAGGACCAAGAGGATTCAAAGGAGATATGGGCGTGAAAGGGCCTGTTGGC 1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1530 CIGCTCAGTGCCCGGCTGGACCTCCAACGTCCGGAACCTCTCCCATGATCGTGGAGGAGATG 1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1710 GGCAGAGGCCCGAAAGGAGCCCCGGCATCTTGGGCCCCCTGGGACCCCAGGGTCCTCAG 1769
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1830 CCAGGCCTCAAAGGCTCAAAGGCAGCTTTGGAACTGGAGGGCCGAGA------- 1877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93 ProGlyGluArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGly 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             113 SerProGlyLysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProPro 132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 LeuMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIleMetGluGluMet 24
scavenger receptor protein; intracellular stress; arteriosclerosis; diabetic circulatory obstruction; microbial infection; ss.
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                                                                                                                                                                                                                                                                                                                                         Scavenger receptor proteins – for treatment and diagnosis of disorders involving cell stress
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Matches:
Conservative:
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97JP-0233396
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                                                                                                                                                                                                                                                            Nakamura Y, Tokino T;
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P-PSDB; AAY00992.
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Best Local Similarity:
                                               Homo sapiens
                                                                            WO9909159-A1
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13-AUG-1997;
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Pred. No.:
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Fatent No. 577349
GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
ADDRESSEE: ALEMR, HOHBACH, TEST, ALBRITTON & HERBERT
STREET: 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHTIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,255
US-09-167-364-1
US-09-449-907-1
US-09-449-907-1
US-09-029-348-20
US-08-749-200-5
US-08-749-200-5
US-08-749-200-5
US-08-749-200-5
US-08-749-705-1
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US-08-749-705-1
US-08-749-705-1
US-09-523-467-9
US-09-523-467-9
US-09-533-7028-264
US-09-130-09-59
US-09-130-09-59
US-09-131-170-3
US-09-453-7028-116
US-09-453-7028-16
US-09-453-7028-116
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US-09-535-521-3
US-09-535-521-4
US-09-535-521-4
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US-08-642-255-50
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ATORREY/AGENT INFORMATION:
NAME: ROWLAND, BETLEAM I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: A555
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 494-8771
TELEFAX: (415) 494-8771
TELEFAX: 910 277299 FHT UR
INFORMATION FOR SEQ ID NO: 60:
SEQUENCE CHARACTERISTICS:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
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-MODEL-frame+ p2n.model - DBV=xlp
-Q-Cgn2_1/USPTO_spool/US09763712/runat_14032003_100951_18187/app_query.fasta_1.1877
-Q-Cgn2_1/USPTO_spool/US09763712/runat_14032003_100951_18187/app_query.fasta_1.1877
-DB-1ssued_ratents_NA -OFMT-fastap -SUFFIX-rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX-blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE-FCT -THR_MAX_LBO -TRRANS=human40.cdi
-MODE-LCCAL -OUTFMT-pto -NORM-ext -HEAPSISE=500 -MINLEN-0 -MAXLEN-200000000
-USER-US09763712_@CGN_1_1.108_@runat_14032003_100951_18187 -NCPU-6 -ICPU-3
-NO_XLDXY -NO_MAP -LAGREQUERS -NGE_SCORES=0 -WARIT -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THRRADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPEXT=7
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/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
                               GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                               nucleic search, using frame_plus_p2n model
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ADDRESSEE: DILMORTH & BARRESE
STREET: 333 EARLE OVINGTON BOULEVARD
CITY: UNIONDALE
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                                                       other nucleic acid /desc = "synthetic"
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Patent No. 5821089
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APPLICANT: BUECHTER, DOUGLAS
APPLICANT: ZHANG, GUANGHUI
APPLICANT: CONNOLLY, KEVIN
NUMBER OF SEQUENCES: 5
                                                                                                                    1.74e-17
459.50
53.16%
48.95%
23.69%
LENGTH: 810 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                            linear
                                                                                                                                                 Percent Similarity:
Best Local Similarity:
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MOLECULE TYPE:
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Mismatches:
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NAME: STEEN, JEFREY S.
REGISTRATION NUMBER: 32,063
REFERENCE/DOCKET NUMBER: 203-1632
TELECOMMUNICATION INFORMATION:
TELEPHONE: 516-228-8484
TELERAX: 516-228-8516
INFORMATION FOR SEQ ID NO: 1:
                                                                                                    MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-SOFTWARE: Patentin Release #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.57e-16
452.50
52.11%
46.48%
23.32%
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TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                         ZIP: 11553
COMPUTER READABLE FORM:
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Best Local Similarity:
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COUNTRY:
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Qy   103 GlySerGlnGlyProLysGlySerArgGlySerProGlyLySProGlyPro 119		SULT 4 -09-029- Sequence Patent N GENERAL APPLICA TITLE OF FILE RE CURRENT NUMBER	JENGTH: 1608   TYPE: DNA	4 Gaps: 2A-2_COPY_206_547 (1-342) x US-09-029-348- SHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGLyPr :	Oy 50 ProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLys 69
Oy 188 201	RESULT 3  UR-08-642-255-50  US-08-642-255-50  Sequence 50, Application US/08642255  Patent No. 5773249  GENERAL INFORMATION:  APPLICANT: CAPPELLO, Joseph  TITLE OF INVENTION: High Molecular Weight Collagen-Like  TITLE OF INVENTION: Protein Polymers  UNMBER OF SEQUENCES: 135  CORRESPONDENCE ADDRESS:  ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT  STREET: A Embarcadero Center, Suite 3400  CITY: San Francisco	STATE: California COUNTRY: USA ZIP: 94111-4187 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/642,255 FILING DATE: CLASSIFICATION: 435 SATTORNEY/AGENT INFORMATION: NAME: ROWLAND, Bertram I. REGISTRATION NUMBER: 20,015 PEPEDEMORY/COCYETM WINDED: A SECREE 2 ATTOR	7ATION INFORMATION	Alignment Scores: 6.41e-17 Length: 756 Pred. No.: 6.41e-17 Length: 756 Score: 448.50 Matches: 87 Percent Similarity: 55.03% Conservative: 6 Best Local Similarity: 51.48% Mismatches: 63 Query Match: 1 Gaps: 2	US-09-763-712A-2_COPY_206_547 (1-342) x US-08-642-255-50 (1-756)  QY

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	111 ArgGlySerProGlyLys 122	123SerGlyAspProGlyProProGlyProProGlyLysGlu 135	136 GlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGlu 155 	156 ProGlyValProGlyProArgGlyLeuPro	167 LeuProGlyVal	178 GlyProProGlyProProGlyProSerGly	188AlaValValProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsnGly 206 	207 CysProProHisTrpLysAsnPheThrAspLysCys 218	RESULT 5  Sequence 1, Application US/08159784  Partent No. 5643783  GENERAL INFORMATION:  GENERAL INFORMATION:  GENERAL INFORMATION:  APPLICANT:  BJOTH R. Olsen  TITLE OF INVENTION:  ADDEESSE:  ADSTOR:  ADSTOR:  ADSTOR:  ADSTOR  STRET:  ADSTOR  STRET:  COMPTER READABLE FRM:  MEDIUM TYPE:  ADSTOR  MEDIUM TYPE:  ADSTOR  COMPTER:  MEDIUM TYPE:  ADSTOR  MEDIUM TYPE:  ADSTOR  MEDIUM TYPE:  ADSTOR  COMPTER:  ADSTOR  ADSTO
Q	O <sub>Y</sub> Db	Oy Db	O D	Qy Db	Q D	QY Db	Oy Db	Oy Op	80

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RESULT 6
US-09-297-269-39
Sequence 39, Application US/09297269
Sequence 39, Application US/09297269
Patent No. 6451557
GENERAL INFORMATION:
APPLICANT: VAUGHAN, Maria
APPLICANT: RAMSHAW, John A.M.
APPLICANT: WERKMEISTER, Jerome A.
TITLE OF INVENTION: A METHOD FOR PRODUCING, IN YEAST, A HYDROXYLATED TRIPLE
                                                                                                                                                                                                                       1326
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Mismatches:
Indels:
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Matches:
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428.00
46.418
40.08%
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; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-159-784-1
                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
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1063 ACTGGGGAAACATGCATAAGTGCCAATCCTTTGAATGTTCCACGGAAACACTGG----- 1116
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                                                                                                                                                                             883 CTCAAGTCTGTTAATGGACAAATAGAAAGCCTCATTAGTCCTGATGGTTCTCGTAAAAAC 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  249 GluGluGlnGlnTrpIleLysLysGlnMetValGly---ArgGluSerHisTrpIleGly 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268 LeuThrAspSerGluArgGluAsnGluTrpLysTrp------LeuAspGly 282
                                                                 835 CCTGAA------CCAATGGATTTCAAAATCAACGCGATGAGATTATCACTTCA
                                                                                                                       217 ---LysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLys-----
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Patent No. 5773248
GENERAL INFORMATION:
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
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        202 ProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAsp-
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FILING DATE: US/08/555,669 FILING DATE: U3-NOV-1995 CLASSIFICATION: 435
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Matches:
Conservative:
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STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: USA
ZIP: 10036
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
COMPUTER: IBW PC COMPATIBLE
COMPUTER: IBW PC COMPATIBLE
COMPUTER: IBW PC COMPATIBLE
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ATORNEY/AGENT INFORMATION:
NAME: Halluin, Alberton:
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 8389
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-369
TELERAX: 415-854-369
TELERAX: 66141 PENNE
INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
LENGTH: 2543 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
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419.00
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LOCATION: 47..2098
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TITLE OF INVENTION: HELICAL PROTEIN, AND YEAST HOST CELLS USEFUL IN SAID TITLE OF INVENTION: METHOD (As Amended)
FILE REFERENCE: Q54094
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              118 GlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLySGluGlyLeu 137
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 ValIleMetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPhe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                             CURRENT FILING DATE: 1999-04-28

CURRENT FILING DATE: 1999-04-28

EARLIER APPLICATION NUMBER: P03310

EARLIER FILING DATE: 1996-10-29

EARLIER PELING DATE: 1996-10-29

EARLIER PELING DATE: 1996-12-19

EARLIER FILING DATE: 1997-10-29

NUMBER: PCTAU97/00721

EARLIER FILING DATE: 1997-10-29

NUMBER: PER PELING DATE: 1997-10-29

SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Collagen Type III Alpha I Chain
US-09-297-269-39
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424.50
42.48%
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Pred. No.:
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Percent Similarity:

us-09-763	
	3-712A-2_COPY_206_547 (1-342) x US-08-555-669-11 (1-2543)
Oy 27 Db 986	7 ValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyProProGly 46 :::    ::    ::
Qy 47	ProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLys 66 :::
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10	
Qy 87	7 IleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySer 104
Db 1151	
Oy 105	5GlnGlyProLys 108
	GlySerArgGlySerProGlyLycsProGlyProGlnGlyProSerGlyAspProGlyPro 128
Db 1271	
Qy 129	9 ProGlyProProGlyLysGluGlyLeuProGlpGlyProGlnGlyProProGlyPheGlnGly 148
Db 1331	
	LeuGlnGlyThrValGlyGlu
_	CTTCCTGGGGATAAAGGAGAACTGGGTCCCAGCGGCCTGGTCGGACCCAAAGGAGAGTCT
Db 1451	
•	ProGlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGlyValProGly
4	
Db 1571	A
Qy 173	3 173
Db 1631	1 TGTGGGGGGATGATCAGCGAACAAATTGCACAGTTAGCCGCGCACCTAAGGAAGCCTTTG 1690
Qy 174	4
Db 1691	
Qy 187	
Db 1751	
Qy 199	
Db 1811	1 CTGGGAGACCCCGGGCCCAGAG1832
Qy 216	
pb 1833	3 1859 3 1859
Qy 236	6 uAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGluGlnGlnTrpIleLysLy 256
Db 1860	

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1875 --------GCTGGACGGCCTGAAGGACCAGGGCCCCAAGGA 1912
                                                                                                    1972 GCCTCCCGGAGATCCTGGGCTTCCAGGTGCCATTGGGGCCCCAGGGGACACCGGGGATCTG 2031
                                                                           276 uTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAs 296
256 sGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGl 276
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Sequence 11, Application US/09073663

SEREMATION: Richard

APPLICANT: Brewton, Richard

TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF

NUMBER OF SEQUENCES: 32

CORRESPONDENCE ADDRESS:

ADDRESSEE: MGregor & Adler, LLP

STREET: BOULT Candle Lane

CITY: HOUSTON

STATE: Texas

COUNTRY: USA

ZIP: 77071
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91
176
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Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                             296 pAsnTrpGlyHisGlyHisGlyProGly------
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MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh OS 8.1
SOFFWARE: Microsoft WORD for Macintosh
CURRENT APPLICATION DATE:
APPLICATION NUMBER: US/09/073,663
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Benjamin Aaron Adler, Ph.D., J.D.
REGISTRATION NUMBER: D5913D
REGISTRATION NUMBER: D5913D
TELEPONGVET NUMBER: D5913D
TELEPONGVET NUMBER: D5913D
TELEPONG CHARACTERISTICS:
LENGTH: 2543 base pairs
TELEPAX: (713) 777-6908
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHRACTERISTICS:
LENGTH: 2543 base pairs
TELEPAX: UNKNOWN
MOLECULE TYPE: CDNA
FEATURE:
CONDAILS TYPE: CDNA
FEATURE:
CONDAILS TYPE: CDNA
                                                                                                                                                                                                                                                             2032 CGACACCTCAGCCTGCCAAGGAGCCGTGTTAGGAGGG 2068
                                                                                                                                                                                                                                       306 -----GluAspCysAlaGlyLeuIleTyrAlaGly 315
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Best Local Similarity:
Query Match:
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LOCATION:
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103   General Control Contro	CTCGATGGCCGGAAGGGGGGCCGCCAAGC  TO AGGGGCCCGAAGGGGGGCCCCCAAGGCGGGCCCCAAAGGCCGGAAGAGGGGGCCCCAAAGGCCGAAGAGCGGGCCCCAAAGGCCGAAGAGCGGGCCCCAAAGGCCGAAGAGCGGGCCCCAAAGGCCCAAAGGCCCAAAGGCCCAAAGGCCCAAAGGCCCCAAAGGCCCAAAGGCCCCAAAGGCCCCAAAGGCCCAAAGGCCCCAAAGGCCCAAAGGCCCCAAAGGCCCAAAGGCCCCAAAGGCCCCCAAAGGCCCCCC	Oy 296 pASnTrpGlyHisGlyHisGlyProGly	GENERAL INFORMATION: APPLICANT: CAPPELLO, Joseph APPLICANT: FERRARI, Franco TITLE OF INVENTION: High Molecular Weight CC TITLE OF INVENTION: Protein Polymers NUMBER OF SEQUENCES: 135 CORRESPONDENCE ADDRESS: ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON STREET: A Embarcadero Center, Suite 3400 CITY: San Francisco STATE: California COUTRY: USA TOP: 4411-4187	COMPUTER READABLE FORM:  MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version CURRENT APPLICATION DATA: CURRENT APPLICATION WHBER: US/08/642,255 FILING DATE: CLASSIFICATION: 435 ATORNEY AGENT INFORMATION: NAME: ROWLAND, BETTAM I. REGISTRATION NUMBER: 20,015 REGISTRATION NUMBER: A55556-3/BIR TELECOMMUNICATION INMBER: A55556-3/BIR	TELEPHONE: (415) 494-8701  TELESA: (415) 494-8771  TELEX: 910 277299 FFT UR  INFORMATION FOR SEQ ID NO: 48:  SEQUENCE CHARACTERISTICS:  LENGTH: 432 base pairs  TYPE: nucleic acid  STRANDEDNESS: double  TOPOLOGY: linear  MOLECULE TYPE: other nucleic acid  DESCRIPTION: /desc = "synthetic"  US-08-642-255-48	Alignment Scores:  Pred. No.:  Score:  Score:  Percent Similarity:  55.70%  Mismatches Query Match:  1.26%  Mismatches Indels:  DB:  US-09-763-712A-2_COPY_206_547 (1-342) x US-08-642  Qy 43 GlyProProGlyProArgGlyProArgGlyAspArgGly  Db 10 GGCCCAGCAGCTCCGAAGGCCCCCAGCAGGCCCCCAGCAGGCCCCCCAGCAG
. 8 2 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6	986 CTCGATGGCCAGAAGGGAGGCTGGTCGCAAC	105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105   105	149   LeuGlnGlyThrValGlyGlu	1571 ATCACGGGAAGCCGGGAAGGAAGGAGGAGCCAGCGAGCAGCA	199ThrProalaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 199ThrProalaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 1811 CTGGGAGACCCGGGCCCAGAG

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SCCCAGGGGACACCGGGGATCTG 2031
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|| :::|| || ||||||||
|GCCGAAAGGTGCGCTGGACCG 69
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                                                                                               Collagen-Like
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130 CCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGACCGGCTGGTCCACCG 189
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       343 GETCCACCGGGTCCTCCGGGACCTGCAGGCCCGCCAGGTGCCCCATGGCCCCAGGAGCCG 402
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Patent No. 5643783
GENERAL INFORTION:
GENERAL INFORTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
Mismatches:
Indels:
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COUNTRY: U.S.A.

ZIP: 02110-2804

COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb

COMPUTER: IBM PS/2 Model 502 or 553X

OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,784

TILING DATE: December 1, 1993
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48.98%
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STATE: Massachusetts
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STRANDEDNESS: single
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Best Local Similarity:
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US-08-159-784-4
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96 ArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySer----- 113
                                                                                                                                                                                                                                   -----GGCCCTCCAGGACCCAAGGGCCCCAAAGGAGAAGTG 705
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APPLICANT: Reeders, Stephen T., Morrison, Karen E., Hudson, Billy
APPLICANT: G.
                                                                                            ---GlnGlyProProGlyProThrGlyAsnLysGly
                                                                                                                       68 GlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGlyProIle
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TITLE OF INVENTION: Polynucleotides
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
ADDRESSEE: Vale University, Office of Cooperative Research
STREET: 246 Church Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
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PRIOR APPLICATION DATA: No. 5424408 applicable
ATTORNEY/AGENT INFORMATION:
NAME: Barth, Richard S.
REGISTRATION NUMBER: 28180
REFERENCE/DOCKET NUMBER: 900983/RB
                                                                                                                                                                                                                                                                                  88 GlyProAlaGlyProProGlyGlu------
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FILING DATE: 11/30/90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OPERATING SYSTEM: Macintosh OS7.0 SOFTWARE: Microsoft Word 5.1a CURRENT APPLICATION DATA:
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OPERATING SYSTEM: Macintos
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STATE: Connecticut
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199 ThrProAlaProGluAspAsnGlyCysPro-
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Best Local Similarity:
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; LOCATION: (1)
US-08-399-889-1
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Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                     LIBRARY: Bovine lens cDNA
CLONE: KMC15
POSITION IN GENOME: No. 5424408 known
                                     TELEX: 236268
INFORMATION FOR SEO ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1416 base pairs
TYPE: Nucleic acid
STRANDEDNES: Double
TOPOLOGY: Linear
MOLECULE TYPE: cDNA to MRNA
HYPOTHETICAL: NO
                                                                                                                                                                                                                             INDIVIDUAL ISOLATE: Unknown
DEVELOPMENTAL STAGE: Unknown
TELECOMMUNICATION INFORMATION:
             TELEPHONE: (212) 972-1400
TELEFAX: (212) 370-1622
                                                                                                                                                                                                                                                                                                                                                                                                      3.6e-14
402.50
46.62%
38.72%
20.75%
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                                                                                                                                                                                                   ORGANISM: Calf
STRAIN: Unknown
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Best Local Similarity:
                                                                                                                                                                                                                                                                         IMMEDIATE SOURCE
                                                                                                                                                                     ANTI-SENSE: NO
ORIGINAL SOURCE:
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                           TELEFAX:
TELEX: 2
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652 GGACCA---CCTGGATCCGATGGCCTGCCAGGCTTGAAGGGGAAACC-TGGAACACTGG 707
                                                                                    215 ThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPhe 234
                                                                                                                             708 ACC---ACCTGCAGCAGCGGCAGTGATGAGGGGCTTTGTCTTTACCCGGCACAG----- 758
                                                                                                                                                                        235 CysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIle 254
                                                                                                                                                                                                                                                            255 LysLysGlnMetValGlyArgGlu····SerHisTrpIleGlyLeuThrAspSerGlu 272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/08399889B
| Patent No. 5973120|
| CENERAL INFORMATION:
| GENERAL INFORMATION:
| APPLICANT: Reeders, Stephen T
| APPLICANT: Morrison, Raren E
| APPLICANT: Hudson, Billy G
| TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
| FILE REFERENCE: 951263A
| CURRENT APPLICATION NUMBER: US/08/399, 889B
| CURRENT FILING DATE: 1995-03-07
| EARLIER APPLICATION NUMBER: 07/621091
| EARLIER FILING DATE: 1990-11-30
| NUMBER OF SEQ ID NOS: 22
| SOFTWARE: PatentIn Ver. 2.0
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Conservative:
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139 GlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyVal 158
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352 AAAGGGAAGAAGGGTAATTCAGGATTTCCAGGACCACGTGGACCTCCAGGGCAAAGTGGA 411
                                                                                                                                                         412 CCAAAAGGACCACCTGGAGTACGTGGAGGCCTGGCACAGTGAAGATCATCTCCCTTCCA 471
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Sequence 1, Application US/09167364

Patent No. 6007980

GENERAL INFORMATION:
APPLICANT: Reeders, Stephen T
APPLICANT: Hudson, Billy G

TITLE OF INVENTION: Alpha 3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 951263B

CURRENT APPLICATION NUMBER: US/09/167,364

CURRENT FILING DATE: 1998-10-07

EARLIER PILING DATE: 1998-10-07

SEQIID NOS: 25

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO: 25
                                                                                                                                                                                                                                                                                     111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 111 | 
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US-09-167-364-1
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Best Local Similarity:
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                     62 ProThrGlyAsn------LysGlyGlnLysGlyGluLysGlyGluProGly
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42 GlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGly
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APPLICANT: Hudson, Billy G
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REPRENCE: 95-1263-C
CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILING DATE: 1999-11-12
NUMBER OF SEO ID NOS: 65
SOFTWARE: PatentIn Ver. 2.0
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Patent No. 6277558
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LENGTH: 1416
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APPLICANT: Jones, Karen A.
APPLICANT: Volkmuth, Wayne
APPLICANT: Walker, Wichael G.
TITLE OF INVENTION: BONE REMODELING GENES
FILE REFERENCE: PB-0014 US
CURRENT APPLICATION NUMBER: US/09/484,970B
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SOFTWARE: PERL Program
                                                                                                                                                      ORGANISM: Homo sapiens
FEATURE:
            GENERAL INFORMATION:
APPLICANT: Jones,
                                                                                                                      SEQ ID NO 4
LENGTH: 4359
                                                                                                                                             TYPE: DNA
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Matches:
Conservative:
Mismatches:
Indels:
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20.75%
           ; LOCATION: (1)..(1416)
US-09-439-897-1
                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
; NAME/KEY: CDS
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US-09-484-970B-4
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. 6426186 331365 (1553795CB1)
US-09-484-970B-4
                                                                                                                                                                                                                                                            41 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArg-----
                                                                                                                              Conservative:
Mismatches:
Indels:
                                                                                                              Matches:
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54.89%
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Best Local Similarity:
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Sequence 762, App
Sequence 3946, App
Sequence 3946, App
Sequence 2094, App
Sequence 1044, App
Sequence 206, App
Sequence 206, App
Sequence 22, Appl
Sequence 22, Appl
Sequence 448, App
Sequence 42, Appl
Sequence 247, App
Sequence 133, Appl
Sequence 1138, App
Sequence 255, Appl
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COMPUTER: IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
US-09-919-497-6
US-09-954-456-762
US-09-980-107-3946
US-09-980-107-3946
US-09-980-107-3946
US-09-980-107-3947
US-09-980-107-3947
US-09-925-299-206
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US-09-925-301-42
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0 US-09-815-343-1516

US-09-902-941-1138

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US-09-964-81-961

US-09-91-954-255

US-09-919-497-7

US-09-915-343-1517

US-09-915-362-64
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US-09-978-697-613
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US-09-998-282A-613
US-09-998-82A-613
US-10-174-590-331
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STREET: 87 CambridgePark Drive
CITY: Cambridge
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MCCOy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa
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Treacy, Maurice
Spaulding, VIKKI
PINVENTION: SECHTED P
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     0110000
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ADDRESSEE: Genetic
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   ZIP: 02140
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 TITLE OF
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-Q=Cq012_1/VSPTO_spool/YG09763712/runat_14032003_100950_18119/app_query.fasta_1.1877
-Q=Cq012_1/VSPTO_spool/YG09763712/runat_14032003_100950_18119/app_query.fasta_1.1877
-LOOPCL=0 -LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX=blosum62
-TARNS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-TARNS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-MAXLEN=200000000 -USER=USO9763712_@CGN_1_1_123_@runat_14032003_100950_18119
-NCPL=6 -ICPU=3 -NO_XMPAY -LARGEQUERY -NGC_SCORES=0 -WAIT -LONGLOG
-DBV_TINEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XARPOP=10 -XGAPEXT=0.5 -FGAPOP=6
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Sequence 2274, Ap
Sequence 57, Appl
Sequence 57, Appl
                                                                                                                 08:23:12 ; Search time 166.172 Seconds (without alignments) 1596.010 Million cell updates/sec
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO7_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/DENEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
                   5.1.4_p5_4578
Compugen Ltd.
                                                                                   nucleic search, using frame_plus_p2n model
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US-09-954-456-2274
US-09-924-340-57
US-09-992-600A-57
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                 version:
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Maximum Match 1008
Listing first 45 summaries
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, Ygapext
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                 GenCore
Copyright (c) 1993
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DB seq length: 2000000000
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                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-5un-2000
CLASSIFICATION: <UNKNOMD>
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                     NO: 198
                                                                                                                                                                                                                                       Gaps:
                                     NAME: Sprunger, Suzanne A. REGISTRATION NUMBER: 41,323 TELECOMMUNICATION INFORMATION:
                                                                TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
WAATION FOR SEQ ID NO: 198:
SEQUENCE CHARACTERISTICS:
                                                                                                                                TOPOLOGY: linear
MOLECULE TYPE: CDNA
SEQUENCE DESCRIPTION: SEQ ID
                                                                                                    LENGTH: 2930 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                       2.49e-95
1934.00
99.71%
99.71%
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Best Local Similarity:
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GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Young, Paul
TITLE OF INVENTION: Sets
FILE OF INVENTION: Sets
FILE OF INVENTION: Sets
FILE REPERENCE: 689290-76
CURRENT APPLICATION NUMBER: US/60/233,617
PRIOR PAPLICATION NUMBER: US/60/234,052
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-20
PRIOR PRILING DATE: 2000-09-20
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR PILING DATE: 2000-09-26
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                                                                                       261 ArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeu
  PheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGluAspLysSerSer
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Mismatches:
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PRIOR FILING DATE: 2000-09-27
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SOFTWARE: PatentIn version 3.0
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US-09-954-456-2274
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Best Local Similarity:
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US-09-954-456-2274
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LENGTH: 1410
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GENERAL INFORMATION: APPLICANT: Bejanin, Stephane APPLICANT: Bejanin, Stephane ITIE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF FILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF FILE REFERENCE: 91.052.REG CURRENT APPLICATION NUMBER: US 60/305,456 PRIOR FILING DATE: 2001.07-13 PRIOR FILING DATE: 2001.07-13 PRIOR FILING DATE: 2001.06-29 PRIOR FILING DATE: 2001.06-29 PRIOR FILING DATE: 2001.06-25 PRIOR FILING DATE: 2001.05-25 PRIOR FILING DATE: 2001.05-25 SOFTWARE: JPARENT ON UMBER: US 60/293,574 PRIOR FILING DATE: 2001.05-25 SOFTWARE: JPARENT ON UNBER: US 60/293,574 PRIOR FILING DATE: 2001.05-25 SOFTWARE: JPARENT ON UMBER: US 60/293,574 PRIOR FILING DATE: 2001.05-25 SOFTWARE: JPARENT ON UMBER: US 60/293,574 PRIOR FILING DATE: 2001.05-25 NUMBER OF SOI ID NOS: 112 SEQ ID NO 57 SEC ID NO 57 SEQ ID NO 57	Alignment Scores: 6.26e-17 Length: 1133 Score: 455.00 Matches: 98 Score: 47.46% Conservative: 14 Best Local Similarity: 47.46% Conservative: 14 Best Local Similarity: 47.56% Mismatches: 50 Query Match: 9.41.53% Indels: 74 Best Local Similarity: 41.53% Mismatches: 50 Us-09-763-712A-2_COPY_206_547 (1-342) x US-09-924-340-57 (1-1133)  Qy 41 LeuGlnGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro Db 140 CTCCCAGGCCCCAGGCCCAGGCGCGCGAGGAGCAAGGTAACTCC 199	61 GlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyPro 80   11   11   11   11   11   11   11	Qy         120        GlnGlyProSer            Bb         380         GGGATTGAGGCCCGCCGGTCTGGATGGTTGGATGGAAGCTGGCTTG           Qy         124          GlyAspProGlyProPro
10) Probro	170 GIGAGAAAGTGGGCTTCCAGATGTTCTTCTGAGGCAGCAGCTTGAGGGAAAGTGGGCTTCCAGATGTTGCTTCTTGAGGCAGCATGAGGCCTTCCAGGGAAAGTGGCCTTCCAGATGTTGCTTCTCTGAGGCAGCTTGAGGCCTTACAGGGAAAGTGGCCTTCCAGATGTTGCTTCTCTCAGGGAAAGTTACAGGGAAAGTTGAGAAAGTTGAGAAAGTTGAGAAAGTTGAGCTTACTCTCAGTAAAGAAAG	Db 990 ATTTACGAGGCACAGCTGTGCACACAGGCTGGTGGACAGTTGGCCTCTCCCACGCTC 1049  Qy 247 rargGluGluGluGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrpIl 266	Db 1170 CTATTCCAACTGGGCCCAAGGGTCATGGCGGTCAGA 1217 Qy 306 uAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAs 326

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US-09-763-712A-2_COPY_206_547 (1-342) x US-09-992-600A-57 (1-1133)
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                                                                                                                                                                                170 ValProGlyMetProGlyProLysGlyProProGlyProPro-----GlyProSerGly 187
                                                                                                                                                                                                   APPLICANT: Benjanin, Stephane
APPLICANT: Benjanin, Stephane
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.042.DIV
CURRENT APPLICATION NUMBER: US/09/992,600A
CURRENT APPLICATION NUMBER: US/09/992,600A
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-19
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                   188 AlaValValProLeuAlaLeuGlnAsnGluPro---ThrProAlaPro 202
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Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                                                                              Sequence 57, Application US/0992600A Publication No. US20030027161A1 GENERAL INFORMATION:
                                                 165 ProGlyLeuPro------
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47.46%
41.53%
23.45%
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SOFTWARE: JPatent
SEQ ID NO 57
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LOCATION: 965..1133
FEATURE:
NAME/KEY: POLYA_Signal
LOCATION: 1101..1106
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: polyA_site LOCATION: 1118..1133
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Best Local Similarity:
Query Match:
DB:
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LOCATION: 476..964
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US-09-992-600A-57
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81 AlaGlyGluArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGly 100
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Patent No. US20020106662A1

GENERAL INFORMATION:

APPLICARY: Mutter, George L.

TITLE OF INVENTION: PROGNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER
FILE REPERENCE: B0801/7225

CURRENT APPLICATION NUMBER: US/09/919,497

CURRENT FILING DATE: 2001-07-31

PRIOR APPLICATION NUMBER: US 60/221,735

PRIOR FILING DATE: 2000-07-31

NUMBER OF SEQ ID NOS: 100
                                                                                                                                                                                                                                                                                              61 GlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    133 -----GlyLysGluGlyLeuProGlyProGln--------GlyProPro
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NAME/KEY: Unsure

LOCATION: (2434)...(2434)

OTHER INFORMATION: n = a,

US-09-919-497-6
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ORGANISM: Homo sapiens
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58 (1-6158)  (1-6158)  (1yProProGlyPro 62	PRIOR FILING DATE: 2000-09-26  PRIOR APPLICATION NUMBER: US/60/235,711  PRIOR APPLICATION NUMBER: US/60/235,720  PRIOR FILING DATE: 2000-09-27  NUMBER OF SEQ ID NOS: 2276  SOFTWARE: PATENTE DATE: 2000-09-27  NUMBER OF SEQ ID NOS: 2276  SOFTWARE: PATENTE DATE: 2000-09-27  CORPET INFORMATION: A OF 2  LENGTH: 6158  FRAUNE: DNA  ORGANISM: HOMO Sapiens  FRAUNE:  NAME/KEY: misc_feature  OCTHER INFORMATION: n=a,t,g or c  US-09-954-456-762  Alignment Soores: 3.35e-16  PRIOR FILING DATE: 30,018  CONSETY  PRIOR FILING DATE: 30,018  Alignment Similarity: 39,81%  Consery  PRIOR FILING DATE: 2000-09-26  Alignment Similarity: 30,81%  Mismafre
Alignment Scores:   3.35e-16   Length:   6158	4572   GGTGACCGAGGGCTCCCAGGAGCAAAAGGGGATGGGGGATT

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ng Anti-Cancer Therapeutic Agents Using C
                                                                                                                                                                       CCTTCAAGTTTACTGTAATTTCAC 5086
                     -----GlnTrplleLysLysGlnMe 258
|||||||:: :: :: ::
AATTTCCAATGGGTACTCAGACCAAT 4967
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||| ||| ||| ||||||||||
|SAGGGAGTAAG-AATTTCATCATGGC 5151
ATGGAATGGAAGAATATTTGGTTCC 4907
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:hes: 130
ervative: 38
atches: 76
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258 tValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGluTrpLy 278

Query DB:	Mat	ch:	23.35% 10	Indels: Gaps:	180 18			
ns-0	9-763	-712A-2_COPY_	206_547 (1-342)	x US-09-954-4	56-762 (	(1-6158)		
Qy Dp	43		GlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyPro	GlyAspArgGlySe         GGnGanGanGGCCC	rGlnGlyP :::    TAAGGGTA	roProGlyPro	62	
0y	63						١.	
qq	4092		GTFGGTTTTCCTGGAGATCCTGGTCCTCCTGGGGAACTTGGCCCTGCAGGTCAAGATGGT	CCTGGGGAACTTGG	CCCTGCAG	GTCAAGATGGT	4151	
ço ç	64		GlyAsnLysGlyGlnLysGlyGluLysGlyGluBroGlyProProGlyProAla	GluLysGlyGluPr	OG1yProP	roGlyProAla	81	
ò	82		ProlleGlyPro	enicciedicaaco	oProGlyG	luargGlyGly	4211	
qa	4212			GGAAACGAGGTCC	 rccrggag	CTGCAGGTGCA	4271	
oy .	66		LysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro	LysGlySerArgGl	ySerProG	lyLysPro	117	
qq	4272		ggtgaaaaggtgct	AAGGGGGAAGCAGG	TGCAGAAG	GICCICCIGGA	4331	
oy op	118	AAAACCGGCCCA(	GlyProGlnGlyProSerGlyAspProGlyPro	ProSerGlyAspPro     :::     CTGCAGGAAAGCC	oglypro-            GGTCCAG		128	
οy	129	ProGly	ProGlyProProGlyLysGluGlyLeu	GlyLeu		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	137	
qq	4392	GGCATCCCTGGT	CCTGTGGGAGAACAA	GGTCTCCCTGGAGC	rgcaggcc	AAGATGGACCA	4451	
ý f	138		ProGlyProGlnGlyProProGlyPhe			1 C C K K C C E C C	146	
à	146			500000000000000000000000000000000000000		100000000000000000000000000000000000000	146	
g	4512		GAAAAGGGACATCCTGGTTTAATTGGCCTGATTGGTCCTCCAGGAGAACAAGGGGAAAAA	CTGATTGGTCCTCC	AGGAGAAC	AAGGGGAAAAA	4571	-
δ	147	GlnGly	GlnGlyLeuGlnGlyThrValGlyGluPro	GlyGluPro	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Glyval	158	
QQ	4572			  GGATCTCCAGGAGC	AAAAGGGG	::: ATGGGGGAATT	4631	
çy B	159	ProGlyProArg(               CCTGGTCCTGCTG	ProGlyProArgGlyLeuProGlyLeuProGlyWalProGlyMetProGlyProLys 	ProGlyValProGly          CCTGGTCCTCCAGG	YMetProG  :::     GTTACCAG	lyProLys       ::: GTCCTCAAGGC	177	
δ	177	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					177	
g	4692		CCAAAGGGTAACAAAGGCTCTACTGGACCCGCTGGCCAGAAAGGTGACAGTGGTCTTCCA	CCCGCTGGCCAGAA	AGGTGACA	GTGGTCTTCCA	4751	
Qy Dp	178		GlyProProGlyProGlyProSerGlyAlaValProLeuAlaLeuGlnAsnGlu	GlyAlaValValPro	oLeuAlaL	euGlnAsnGlu :::	197	
οy	198	ProThrPro-Ala	ProThrPro-AlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLy	yCysProProHisT:	rpLysAsn	PheThrAspLy	217	
QQ	4794	CCTTTACCAATCT		-TGTCCTCCAAAAAACGA-	AACGA	1 1 1 1 1	4824	
ος γ	217	sCysTyrTyrPhe	sCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCy	uIlePheGluAspA	laLysLeu	sGluA:	37	
a	4823	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GAAGACA	ractgaag	GCATGCAAG	4848	
oy Pp	237	pLysSerSerHis::::	pLysSerSerHisLeuValPhelleAsnThrArgGluGluGln	nThrargGluGluG        TACTCGGATGGAAT	ln	TATTTGGTTCC	251 4907	
δλ	252			9	InTrpile	-GlnTrpIleLysLysGlnMe	258	
qq	4908		CTCAATTCCCTGAAACAAGACATCGAGCATATGAAATTTCCAATGGGTACTCAGACCAAT	CATATGAAATTTCC	AATGGGTA	CTCAGACCAAT	4967	

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Sequence 782, Application US/09954456

Patent No. US20020115057A1

GENERAL INFORMATION:

TUTLE OF INVERTION: Process for Identifying Anti-Cancer Therapeutic Agents Using C

TITLE OF INVERTION: Sets

FILE REFERENCE: 689200-76

CURRENT FILING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US/60/234,052

PRIOR APPLICATION NUMBER: US/60/234,052

PRIOR PLICATION NUMBER: US/60/234,923

PRIOR PLICATION NUMBER: US/60/234,923

PRIOR PLILNG DATE: 2000-09-26

PRIOR APPLICATION NUMBER: US/60/235,711

PRIOR PLILNG DATE: 2000-09-26

PRIOR APPLICATION NUMBER: US/60/235,720

PRIOR APPLICATION NUMBER: US/60/235,720

PRIOR APPLICATION NUMBER: US/60/235,720

PRIOR APPLICATION NUMBER: US/60/235,840

PRIOR PLILNG DATE: 2000-09-27

PRIOR PLILNG DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,863

PRIOR PLILNG DATE: 2000-09-27

PRIOR APPLICATION NUMBER: US/60/235,863

PRIOR PLILNG DATE: 2000-09-27

PRIOR PLILNG DATE: 2000-09-28

PRIOR P
   4968 CCA-GCCCGAACTTGTAAAGACCTGCAACTCAGCCATCCTGACTTCCCAGATGGTGAATA 5026
                                                                                                         291 sAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGluAspCysAlaGlyLe 311
                                                                278 sTrpLeuAsp-----GlyThrSerProAsp------TyrLysAsnTrpLy 291
                                                                                                                                                                                                                                                                                                                              311 ulleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCysGl 331
                                                                                                                                                                                                                                             :::|||
5087 ATCTGGT-------GGTGAGACTTGC-----
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Mismatches:
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CORGANISM: Homo sapiens
US-09-954-456-782
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Sequence 786, Application US/09954456
Fatent No. US20020115057A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION:
FILE REFERENCE: 689290-76
CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT PILING DATE: 2001-09-18
PRIOR PILING DATE: 2000-09-18
PRIOR PILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-26
PRIOR PRILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-26
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PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-27
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                                   US-09-763-712A-2_COPY_206_547 (1-342) x US-09-880-107-3946 (1-6728)
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Fatent No. USZ0020122981A1
GENERAL INFORMATION:
APPLICANT: HORNE, DARCI T.
APPLICANT: Vockley, Joseph G.
APPLICANT: Ockley, Joseph G.
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer;
FILE REFERENCE: 44921-5028-W0
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-06-14
FILING DATE: 2000-06-14
FILING APPLICATION NUMBER: US 60/237,054
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: PatentIn Ver. 2.1
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ORGANISM: Homo sapiens
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LENGTH: 6728
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                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
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PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR FILING DATE: 2000-09-27
PRIOR PLLING DATE: 2000-09-27
PRIOR PILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR APPLICATION NUMBER: US/60/235,863
NUMBER OF SEQ ID NOS: 2276
SOFWARE: Patentin version 3.0
LENGTH: 5416
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APPLICANT: Scherf, Uwe
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
FILE REFERENCE: 44921-5028 WO
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: PATENTIN VET. 2.1
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US-09-880-107-2094
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Matches:
Conservative:
Mismatches:
Indels:
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Patent No. US20020142981A1
GENERAL INFORMATION:
APPLICANT: Horne, Darci T.
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Best Local Similarity:
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LENGTH: 5416
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1667 GGNGACCAAGGACCAGCAGGCCGACCTGGAGAAGTAGGAGCACCGGGTCCCCTGGCTTC 1726
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   85 GlyProIleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySer 104
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                                                                  105 GlnGlyProLysGlySerArgGlySerProGlyLysProGlyProGlnGlyPro----
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APPLICANT: Horne, Darci T.
APPLICANT: Wockley, Joseph G.
APPLICANT: Scherf, Uwe
APPLICANT: Gene Logic, Inc.
TITLE OF INVENTION: Gene Expression Profiles in Liv
FILE REFERENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR PILING DATE: 2000-10-02
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEO ID NOS: 3950
SOFTWARE: PatentIn Ver. 2.1
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; OTHER INFORMATION: n = a or c or g US-09-880-107-3947
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Best Local Similarity:
Query Match:
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LENGTH: 5086
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Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REPERENCE: PA-0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
SOFTWARE: PERL PROGram
SEQ ID NOS: 850
SSEQ ID NO 104
LENGTH: 4149
2864 GGACCCTCTGGTATTTCTGGCCCTCCTGGTCCCCTGGTCCTGGTGGGAAAGAGGGCTT 2923
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                                                 138 ProGlyProGln--------
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LOCATION: (4)
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LENGTH: 5145
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TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies FILE REFERENCE: PAIO 10 CURRENT APPLICATION NUMBER: US/09/925,299
CURRENT FILING DATE: 2001-08-10
PRIOR PAPLICATION NUMBER: PCT/US00/05883
PRIOR FILING DATE: 2000-03-08
PRIOR FILING DATE: 1999-03-12
                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
; NAME/KEY: misc_feature
... LOCATION: (5143)
; CTHER INCRMATION: n equals a,t,g, or
US-09-925-299-206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 206, Application US/09925299 Patent No. US20020055627A1 GENERAL INFORMATION:
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22.71%
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US-09-925-299-206
                                                                                Scores:
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                                                                                               Pred. No.:
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49.32%
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Best Local Similarity:
Query Match:
                                                                                                                                                                                   TYPE: DNA ORGANISM: HOMO
                       RESULT 15
US-10-044-090-22
                                                                                                                                                           SEQ ID NO 22
LENGTH: 5432
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COTHER INFORMATION: n equals a,t,g, or many free; many free; masc_feature

COCATION: (17)

COTHER INFORMATION: n equals a,t,g, or many free; many false

COCATION: (5126)

COTHER INFORMATION: n equals a,t,g, or many free; misc_feature

COCATION: (5126)

COTHER INFORMATION: n equals a,t,g, or many free; misc_feature

COCATION: (5143)

COTHER INFORMATION: n equals a,t,g, or use.09-925-299-206
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440.50
49.328
43.388
22.718
NUMBER OF SEQ ID NOS: 1556
SOFTWARE: Patentin Ver. 2.0
                                           TYPE: DNA
ORGANISM: Homo sapiens
                                                                               NAME/KEY: misc_feature
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Best Local Similarity:
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                     SEQ ID NO 206
LENGTH: 5145
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DB:
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Sequence 22, Application US/10044090
Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: Olga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REFERENCE: PA-0028 US
CURRENT FILING NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL Program
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; OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
US-10-044-090-22
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Search completed: March 21, 2003, 12:32:28 Job time : 186.172 secs

Run on:

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BB248064 BB248064
BQ771366 UI-M-FID-
BQ891432 AGENCOURT
BM676508 UI-E-EJO-
BM13891 UI-E-EJO-
BI44584 dai33d10.
AM379436 CM4 HT024
AA012704 RPU1402CG
AA304251 EST17006
AA304251 EST71006
AA561740 EST71069
BQ887163 AGENCOURT
BB749743 BB749743
BM997108 AGENCOURT
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BE200299 601089246
BQ955927 AGENCOURT
AL568743 AL568743
AW958053 EST370123
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                  BC013626 PBC013626 BBM905999 PBM90522937 PBM905999 PBM905999 PBM9059937 PBM9059937 PBM9059937 PBM9059937 PBM90599937 PBM9059999
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BG679800
BM809933
B0942135
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BM4586385
BIA58681
BE529798
BQ713634
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BI456015
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                                                 SUMMARIES
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AL543000
AA361740
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TITLE
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SOURCE
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                                                                      Result
                                                                                                                                                                                                                                                                                                           No
                                                                                                                                                                                                                                                                                                                                                                        Command line parameters:
-WODEL-frame+p2n.model -DEV-xlp
-O-/cogn_21/05870_spo_07/059763712/tunat_14032003_100950_18109/app_query.fasta_1.1877
-O-/cogn_21/05870_spo_07/059763712/tunat_14032003_100950_18109/app_query.fasta_1.1877
-DG-EST -OFMT-fastap -SUFFIX-rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS-bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DG-ALIGH-20.0 -THR_SCRE-pct -THR_NATN=0 -ALIGH-15 -MODE-LOCAL
-OUTFMT-pct -NORM-ext -HEAPS1ZE=50 -MINIMEN=0 -MAXEN=200000000
-USER-USO9763712_eCGN_1 1_4575_erunat_14032003_100950_18109 -NCPU=6 -ICPU=3
-NO_XLPXY -NO_MMAP -LARGEQUERY -NG_SCRESS=0 -WAIT -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THR_EADS=1 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
                                                                                             (without alignments)
4899.781 Million cell updates/sec
                                                                                                                                                   1 MQQDLMRSRLDTEVANLSVI......EDVNNFICEKDRETVLSSAL 342
                                                                              March 21, 2003, 08:08:41; Search time 1130.43 Seconds
            GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                        nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                16154066 segs, 8097743376 residues
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1940
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Maximum Match 100%
Listing first 45 summaries
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, Ygapext
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Maximum DB seq length: 2000000000
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gb_est4:*
gb_est5:*
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gb_htc:*
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gb_est1:*
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Xgapop 10.0 ,
Ygapop 10.0 ,
Fgapop 6.0 ,
Delop 6.0 ,
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Perfect score:
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603170460 RC3-GN004

602629884 602995511

Mus muscu

AGENCOURT AGENCOURT AGENCOURT AGENCOURT Tetraodon

pgf2c.pk0 BB613976

AGENCOURT

602626481 AGENCOURT pgmlc.pk0 603170558

RC3-GN004 AGENCOURT

Direct Submission

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KEYWORDS
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                                                                                                                                                                                                                                                                                            clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAK Plate: 5 Row: h Column: 10 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis
Submitted (05-JUN-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1296 ATGCAGCAAGACATGATGAGGTCAAAGTTAGACACTGAAGTGGCCAACTTATCAGTGGTT 1355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1356 AFGGAAGAGATGAACTGGTTGACTCCAAGCACGGTCAGCTCATCAAGAACTTTACCATT 1415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-remail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Baylor College of Medicine Human Genome
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Location/Qualifiers
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14
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Web site: http://www.hgsc.bcm.tmc.edu/cdna/
                                                                NIH-MGC Project URL: http://mgc.nci.nih.gov
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Conservative:
Mismatches:
Indels:
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/tissue_type="Mammary tumor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pCMV-SPORT6"
757 c 760 g 757 t
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/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:10090"
                                                                                                                                                                                                                           Contact: amg@bcm.tmc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /map="C57BL/6J"
                                                                                 Contact: MGC help desk
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Best Local Similarity:
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BQ713873 861 bp mRNA linear EST 16-JUL-2002 AGENCOURT_8482828 NIH_MGC_129 Mus musculus cDNA clone IMAGE:6306240
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Sciurognathi; Muridae; Murinae; Mus
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Apencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/ILNL at:
281 AspGlyThrSerProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyHisGlyProGlyGluAspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPhe
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
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BQ713873
BQ713873.1 GI:21852772
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906 bp mRNA linear EST 21-AUG-2001
603172765F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:5251888 5',
BI456109
                                                                                                                                                                                                                  /note-"Organ: mammary, Vector: pCNV-SPORT6; Site_1: Sall; Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys, NIH"
                                                                                                                                                                                                                      Chordata; Craniata; Vertebrata; Euteleostomi;
Rodentia; Sciurognathi; Muridae; Murinae; Mus.
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112
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/clone_lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross tissue"
/dev_stage="7 months"
/lab_host="DH108"
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Matches:
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house mouse
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BI456109
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                                                  /organism="Mus musculus"
/db_xref="taxon:10090"
/db_xref="taxon:10090"
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/clone=lib="NiHabB (phage-resistant)"
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Mismatches:
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/clone="IMAGE:3962292"
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/tissue_type="Lumor, biopsy sample"
/dev_stage="10 months, virgin"
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Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigator
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                             /strain="FVB/N"
/db_xref="taxon:10090"
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96.34%
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source
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Mus musculus cDNA clone IMAGE:3962292 5',
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM9128 row: m column: 13
High quality sequence stop: 580.
Location/Qualifiers
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                                LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro
                                                                           GlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProGlyPro
                                                                                                                                                                                                            101 SerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysProGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGluProThrPro
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mRNA sequence.
BE910803
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SOURCE
ORGANISM
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AUTHORS
TITLE
JOURNAL
             41
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BE910803
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BQ674807 GG8 bp' mRNA linear EST 15-JUL-2002 AGENCOURT_8035172 NIH_MGC_102 Homo sapiens cDNA clone IMAGE:6212672_5', mRNA sequence.
BQ674807.1 GI:21785641
                                                                                                                                                                                                                                                                                                              178
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                                                                                                                                                                                                         GlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyVal
                                                                                                                                                                                                                                                                     246 CCACCTGGCCCTCCAGGCCCTCAGGAGCAATGGAGCCATTGGCTCTGCAGAATGAACCA
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580
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7
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              Matches:
Conservative:
Mismatches:
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Length:
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601 bp mRNA linear EST 26-OCT-2000 601089246F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:3484163 5', BE290299
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NH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
CONA Library Preparation: Life Technologies, Inc.
CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note-"Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sall; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Library constructory Library L
                                                                                                                                           83 uArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLySGlySerLySGl 103
  288 LysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGluAsp 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA Sequencing by: Incite Genomics, Inc.
Clone distribution: MGC clone distribution information can
Clone distribution: MGC clone distribution information
thrup://image.llnl.gov
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k column: 12
High quality sequence stop: 551.
Location/Qualifiers
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/clone_lib="NCI_CGAP_Mam5"
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/dev_stage="7 months"
/lab_host="DH10B"
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/lab.host="DH10B (phage-resistant)"
/lab.host="DH10B (phage-resistant)"
/note="Corgan: salivary gland; Vector: poTB7; Site_1: XhoI;
Site_2: ECORI; cDNA made by oliqo-dT priming.
Directionally cloned into ECORI/XhoI sites using the
following 5' adaptor: GGCAGGAG(6). Library constructed
by Ling Hong in the laboratory of Gerald M. Rubin
(University of California, Berkeley) using ZAP-CDNA
synthesis kit (Stratagene) and Superscript II RT (Life
Technologies). Note: this is a NIH_MGC Library."
                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutherita; Primates; Catarrhini; Hominidae; Homo.

(Dases 1 to 668)

NIH-MGC http://mgc.ncl.nih.gov/.

NiH-MGC http://mgc.ncl.nih.gov/.

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                   Email: cgapbs-remail.inih.gov
Tissue Procurement: ATCC
CDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM2377 row: c column: 09
High quality sequence stop: 656.
L. Caction/Qualifiers
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/db_xref="taxon:9606"
/clone="IMAGE:6212672"
/clone_lib="NIH_MGC_102"
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AGENCOURT_8763247 NIH_MGC_129 Mus musculus cDNA clone IMAGE:6313500
5', mRNA sequence.
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Mammalia; Eutheria; Rodentia; Sciurognațhi; Muridae; Murinae; Mus
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62 GAGGGCCACAATTGGACCAGTCGGCCCTCCTGGAGAGCGTGGCAGCAAAGGATCCAAAGG 121
                                                                                                                                                                    123 erGlyAspProGlyProProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyP
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/clone="IMAGE:6313500"
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Mus musculus
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pCMV-SPORT6.1.ccdb; Site_1: EcoRV; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT. Average insert size unidirectionally. Primer: Oligo dT. Average insert size 22 kb. Constructed by ResGen, Invitrogen Corp. Note: this is a NIH_MGC Library."

269 c 258 g 169 t 1 others
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               533 GGTCCAACTGGCAACAAGGACAGAAAGGAGAGAGAGGGAGAGCCTGGTCCACCTGGCCCT
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Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                          הבטטניה באחר 552 bp mRNA linear EST 01-JUN-200
EST370123 MAGE resequences, MAGE Homo sapiens CDNA, mRNA sequence.
AW958053
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 552)
Hegde, P., Ql, R., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., Holt, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and Quackenbush, J.
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                                                                                                                                                                                                                                                                      Assessment of gene expression patterns in a model of metastasis using a 19,200 element cDNA microarray Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA Tel: 301 838 3528
Fax: 301 838 0208
Email: johng@tigr.org
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149
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Mismatches:
Indels:
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/db_xref="taxon:9606"
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/note="Vector: pBluescriptSKm"
/112 c 143 g 121 t
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                               418 GAAAAAGACAGGGAGACAGYACTGTCATCTGCATTA
                  GluLysAspArgGluThrValLeuSerSerAlaLeu
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//organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="csDBG05YH04"
/clone="csDBG05YH04"
/clone="csDBG05YH08"
/clone="csDBG05YH08"
/clone="bost="organ: placenta; Vector: pCMVSPORT 6; lst strand cDNA was primed with a NotI-oligo(dT) primer. Five prime and cloned into the Not I and Eco RV sites of the pcMVSPORT 6 vector. Library was constructed by Life pcMVSPORT 6 vector. Library was constructed by Life Technologies. Contact: Feng Liang Life Technologies, on Livitrogen 9800 Medical Center Drive Rockville waryland 20850, USA Fax: (1) 301 610 8371 Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com"

122 a 221 c 217 g 290 t 17 others
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BP 191 91006 EVRY cedex - France
Email: segrefégenoscope.cns.fr, Web : www.genoscope.cns.fr.
Location/Qualifiers
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1 (bases 1 to 967)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Comblished (2001)
Contact: Genoscope
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A rakawa, T., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M., Okazaki, Y., Okido, T., Saito, R., Sakai, K., Sano, H., Sasaki, D., Shibata, K., Shinagawa, A., Shiraki, T., Sogabe, Y., Suzuki, H., Tagami, M., Tagawa, A., Takahashi, F., Takeda, Y., Tanaka, T., Muramatsu, M. and Hayashizaki, Y. tet al. 2001)

L. Unpublished (2011)
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                                                                                                                                                                                                                                                                                                             BB248064 RIKEN full-length enriched, 7 days neonate cerebellum Musmusculus cDNA clone A730023E20 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fax: 81-45-503-9216
Email: genome-res@gsc.riken.go.jp,
URL: http://genome.gsc.riken.go.jp,
URL: http://genome.gsc.riken.go.jp,
Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh
,M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
agi.K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E.,
Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura
, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
Fre Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
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Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Please visit our web site (http://genome.gsc.riken.go.jp/) for
                                                                           361 ATTTATGCTGGGCAGGGGAACGATTTCCAATGTGAAGACGTCAATAACTTTAATTTGCGA 420
                     IleTyralaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPhe-IleCysGl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   On Jul 6, 2000 this sequence version replaced gi:8940810
Contact: Yoshihide Hayashizaki
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Computer-based methods for the mouse full-length cDNA
                                                                                                                                    331 uLysAspArgGluThrValLeuSerSerAlaLeu 342
                                                                                                                                                                     421 AAAAGACAGGAGACAGTACTGGCATCTGCATTA 454
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/organism="Mus musculus"

.638

source

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3'j. cDNA was cleaved with XhoI and BamHI. Vector: a modified pBluescript KS(+) after bulk excision from Lambda
/clone_lib="RIKEN full-length enriched, 7 days neonate
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                                                                                                                                                                                                                                                                                                                                                                                                                                               200 ProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLysCysTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGluAspLysSer
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142
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Mismatches:
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                      /tissue_type="cerebellum"
/dev_stage="7 days neonate"
/lab_host="DH108"
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                                                                                                                                                                                                                                                               146 g
            cerebellum"
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BQ891432 936 bp mRNA linear EST 16-AUG-2002 AGENCOURT_8754195 NIH_MGC_130 Mus musculus cDNA clone IMAGE:6332754
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:10090"
/db_xref="taxon:10090"
/clone="IMAGE:6332754"
/clone=lib="NHLMGC_130"
/lab_host="NHLMGC_130"
/note="Organ: otocysts; Vector: pCMV SPORT6.1.ccdb;
Site_1: EcoRV; Site_2: NotI; Cloned unidirectionally.
Primer: Ollog off: Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 936)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Mark Maconochie, Ph.D. and Nancy L. Freeman,
                                                                                                                                                                                                        TrplleLysLysGlnMetValGlyArgGluSerHisTrplleGlyLeuThrAspSerGlu 272
                                                                                                                                      242 CAGGAAAGCGAATGGAAGTGGCTAGACGGGTCACCTGTTGATTACAAAAACTGGAAAGCT 301
                            LeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGln 252
                                                                                                                                                                                                                                                                                                                                                                                      313 TyralaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCysGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ph.D. cDNA Library Preparation: ResGen, Invitrogen Corp cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bloscience Corporation Clone distribution: MCC clone distribution information car found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: LLAM13790 row: n column: 19
High quality sequence start: 25
High quality sequence stope: 632.
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Matches:
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1. 936
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             333 AspArgGluThrValLeuSerSerAlaLeu 342
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250 c 244
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696.50
91.72%
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BO891432
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JOURNAL
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/clone="Indexofiling"
/clone="Indexofiling"
/clone="Indexofiling"
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/clote="Organ: Brain; Vector: PXY- Asc; Site_1: EcoR I;
/clote="Condition on and Soares, Genome Research, 6:791-806,
1996. Denatured RNA was size fractionated on a 1% agarcse
gol.First strand cDNA synthesis was primed with oligo-dr
primer containing a Not I site. Double strand cDNA was
size selected according to mRNA size fraction, ligated
with EcoR I adaptor, digested with NotI and then cloned
directionally into pXX-Asc vector. The library tag
sequence located between the Not I site and then polyA tail
is CAGCCACGAC. This library was created for the University
Iowa Brain Anatomy Project (BMAP): 'Gene Discovery in the
Developing Mouse Nervous System', supported by National
Institute of Mental Health (NIMH), Hemin Chin, Ph.D.,
program coordinator:
158 c 173 g 206 t lothers
                                                                                                                                                                                            Mus musculus

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Mus.

1 (bases 1 to 808)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Contact: Robert Strausberg, Ph.D.

Email: Gapbs-r@mail.nih.gov

Tissue Procurement: Dr. Jim Lin, University of Iowa
CDNA Library preparation: Dr. M. Bento Soares, University of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa
CDNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortum/LDL at:
                                            BQ771366 808 bp mRNA linear EST 26-JUL-2002 UI-M-FIO-byu-g-09-0-UI.rl NIH_BMAP_FIO Mus musculus cDNA clone IMAGE:5702432 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This clone was contributed by the Brain Molecular Anatomy Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
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Matches:
Conservative:
Mismatches:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Mus musculus"
/strain="C57BL/6"
/db_xref="taxon:10090"
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                                                                                                                BQ771366
BQ771366.1 GI:21979842
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767.00
93.33%
87.33%
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                                                                                                         ACCESSION
VERSION
KEYWORDS
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TITLE
JOURNAL
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RESULT 11
BQ771366
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BM676508.1 GI:18986404
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: msoares@blue.weeg.ulowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
Seq primer: M13 Forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Bummalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
(bases 1 to 500)
Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
451 Ecstein Medical Research Building Iowa City, IA 52242, USA
Tel: 319 335 9256
Fax: 319 335 9565
                                                                                                                                                                                                                                                                                                                                                                655
                                                                                                                                                                                                                                                                   81 AlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGluArgGlyGlyLySGly 100
                                                                                                                                                                                                                                                                                                                         836 AAGGGACTAGTGGGGACCCAGGNACCACCAGGTCCACCAGGNCAGGGATGGACTCCCTGG 895
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                                                                                  1 MetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIle 20
                                                                                                                                         21 MetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIle
                                                                                                                                                                                                              41 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro
                                                     US-09-763-712A-2_COPY_206_547 (1-342) x BQ891432 (1-936)
  194
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Mismatches:
Indels:
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97044477
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87.26%
35.90%
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POLYA-Yes.
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              Query Match:
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Chorotoe="fetal and adult"

//lab_host="DH10B (Life Technologies) (T1 phage resistant)"

//lab_host="DH10B (Life Technologies) (T1 phage resistant)"

//note="Organ: eye; Vector: pT73-Pac (Pharmacia) with a
modified polylinker; Site_1: ECON I: Site_2: Not I:
UI-E-EJO is a subtracted cDNA library constructed
according to Bonaldo, Lennon and Soares, Genome Research,
6:791-806, 1996. First strand cDNA synthesis was primed
with an oligo-dT primer containing a Not I site. Double
stranded cDNA was ligated to an ECON I adaptor, digested
with Not I, and cloned directionally into PT73-Pac
vector: The oligonucleotide used to prime the synthesis of
first-strand cDNA contenins a library tag sequence that is
located between the Not I site and the (dT)18 tail. The
sequence tags for this library are: fetal eyes, AGAATCAAGA;
lloss CGATTAGGCA; eye anterior sequence, This library was
created for the program, Gene Discovery in the Visual
System, supported by National Eye Institute (NEI).
TAG_LIB=UI-E-EJO
TAG_LIB=UI-E-EJO
TAG_SEO=AATGCCGCAT;
OP a 123 c 89 9 179 t
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BM713891.1 GI:19027149
                                            /tissue_type="fetal eyes, lens, eye anterior segment, optic nerve, retina, Retina Foveal and Macular, RPE and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 436
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValAsnAsnPheIleCysGluLysAspArgGluThrValLeuSerSerAlaLeu 342
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Conservative:
Mismatches:
Indels:
/clone="UI-E-EJO-ahq-c-05-0-UI"
/clone_lib="UI-E-EJO"
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dai33d10.y2 NICHD XGC Sp1 bp mRNA linear EST 21-AUG-2001 dai33d10.y2 NICHD XGC Sp1 Xenopus laevis cDNA clone IMAGE:4963626 f. similar to SW:LECH_RAT P02706 ASIALOGLYCOPROTEIN RECEPTOR 1;, BI445884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumor dancer institute, cancer tenome Anatomy Froject (CGAP), Conpublished (1997)
Contact: Robert Strausberg, Ph.D.
Contact: Robert Strausberg, Ph.D.
Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: Xenopus clones from this library are available
through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Xenopus laevis"
/db_xref="taxon:8355"
/clone="lmAGE:4963626"
/clone=lib="MICHD XGC Spl"
/dev_stage="adult" (plage-resistant)"
/lab_host="nH108 (plage-resistant)"
/note="Organ: spleen: yector: pCMV-SPORT6; Site_1: Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Pachnologies insert size 2.4 kb. Constructed by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Anura, Mesobatrachia, Pipoidea, Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 591)
NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                          287 TyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGlu 306
                                                                                                                                                                                                                                                   307 AspCysAlaGlyLeuIleTyrAlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsn 326
                                                                                                                                                                                                                                                                          243 GACTGTGCGTTGATTTATGCTGGCCAGTGGAACGATTTCCAATGTGAAGACGTCAAT 302
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BI445884
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/dev_stage="fetal and adult"
/lab_host="DH10B (Life Technologies) (TI phage resistant)"
/note="Organ: eye; Vector: pT7T3-Pac (Pharmacia) with a
modified polylinker; Site_1: EooR I; Site_2: Not I;
U.E-EJO is a subtracted cDNA library constructed
according to Bonaldo, Lennon and Soares, Genome Research,
6:791-806, 1996. First strand cDNA synthesis was primed
with an oligo-dT primer containing a Not I site. Double
stranded cDNA was ligated to an EcoR I adaptor, digested
with Not I, and cloned directionally into pT7T3-Pac
vector. The oligonucleotide used to prime the synthesis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA; lens, CGATTAGGA; eye anterior sequent, AATGCGCAT; optic nerve, CCATTAAGTG; retina, CGGG; Retina Foveal and Macular, GTCC; RPE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
                                                                                                                                                                                                                                                                                                                                                                                 Email: msoares@blue.weeg.uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, University of Iowa
Clone Distribution: Researchers may obtain clones from Research
Genetics (www.resgen.com).
The following repetitive elements were found in this cDNA
sequence: 443-498, >POLY_A#Simple_repeat
                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                        1 (bases 1 to 507)

Bonaldo,M.F., Lennon,G. and Soares,M.B.

Normalization and subtraction: two approaches to facilitate gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/db_xref="taxon:9606"
/clone="ur_B-EJO-ahq-c-05-0-UI"
/clone_lib="ur_B-EJO"
/tissue_type="fetal eyes, lens, eye anterior segment,
optic nerve, retina, Retina Foveal and Macular, RPE and
                                                                                                                                                                                                                                                                                                  247 ThrArgGluGluGlnGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrpIle 266
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                                                                                                                                                                                                                                              Contact: Soares, MB
Program for Rat Gene Discovery and Mapping
University of Iowa
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183 ProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGluProThrPro---- 200
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                                                                                                                                                                                   165 -----ProGlyLeuProGlyValProGlyMetProGlyProLysGlyProProGlyPro 182
                                                         204
                                                                            146 PheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGlyProArgGlyLeu--- 164
145 GGACCTCCAGGAATACCTGGATTACCTGGAATACCTGGACCTAGAAGTCCTCCAGGGCCT
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  SUMMARIES
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ABL65452
ABK35486
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-DS=NG=02-1/USPTO_SPOOl/US09763712/runat_14032003_100949_18091/app_query.fasta_1.1877
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-LOOPEXT=-0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR-SCORE=-PCT -THR_MAX_100 -THR_MIN-0 -ALIGN=15
-MODEL-CAL.OUTFWT=pto -NORM=ext -HEAPSIZE=500 -MINLEN-0 -MAX.EN=200000000
-USER=US09763712_eCGN_1 1_656_erunat_14032003_100949_18091 -NCPU=6 -ICPU=3
-NO_XEPX* -NO_MAMP -LARGEQUER* -NEC_SCORES=0 -WARI -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
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Copyright (c) 1993 - 2003 Compugen Ltd.
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The invention relates to polynucleotides encoding a new collectin of human origin. The collectin can be used as an antibacterial and antiviral agent and for screening potential drug molecules. The new collectin can be produced by standard recombinant methodology. The present sequence
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Conservative:
Mismatches:
Indels: 1.75e-80 2520.00 100.00% 100.00% Percent Similarity: Best Local Similarity: Alignment Scores: Query Match: Pred. No.: Score:

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                                                                                                                                                                                                                                                   Human; scavenger; receptor; diagnosis; treatment; autoimmune disease; rheumatoid arthritis; gene; ss.
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arteriosclerosis; diabetes; bacterial infection; restenosis; angloplasty;
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                                                                                              2149 GAAGACTGTGCTGGGTTGATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTC
                    ATCGGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCA
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                                                                                                                  Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral scleroals; Shy-brager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel nucleic acids and polypeptides, useful for treating disorders such as central nervous system injuries -
                                                                        361 AsnThrArgGluGluGluGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrp
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Zhang J;
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Yang Y,
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Wang Z, Wehrman T, Xu C, Xue AJ,
Zhou P, Goodrich R, Drmanac RT;
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2000US-0552317.
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14-SEP-2000;
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The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM38642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynuclectides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral nervous system classed neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activities such as: Immune system suppression, Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, cancer diagnosis and therapy, drug screening, assays for receptor activity, retrictions and inflammation, leukaemias and the contraction of the contractivity and inflammation, leukaemias and the contractivity activity and inflammation, leukaemias and the contractivity and inflammation.
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CCAATTGGACCAGCTGGTCCCCCGGAGAGCGTGGCGGCAAAGGATCTAAAGGCTCCCAG
                                                                                                                                                      GlyCysProProHisTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLys
                                                                                                                                                                                                             AsnThrArgGluGluGlnGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrp
             GlyProLysGlySerArgGlySerProGlyLysProGlyProGlnGlyProSerGlyAsp
                                        ProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGly
                                                                                                      1157 GGCTTGCCTGGGGTACCAGGCATGCCAGGCCCCCAAGGCCCCCCCGGCCCTCCTGGCCA
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The present invention provides the protein and coding sequences for 25 novel extracellular matrix and adhesion-associated proteins (EXMADS). These are designated EXMAD-1, EXMAD-2, EXMAD-3, EXMAD-3, EXMAD-1, EXMAD-1, EXMAD-1, EXMAD-1, EXMAD-11, EXMAD-11, EXMAD-12, EXMAD-13, EXMAD-13, EXMAD-14, EXMAD-15, EXMAD-16, EXMAD-17, EXMAD-19, EXMAD-20, EXMAD-21, EXMAD-22, EXMAD-23, EXMAD-22, EXMAD-22, EXMAD-20, EXMAD-23. They are useful in the prevention and treatment of cancers, cell proliferation, cardiovascular, reproductive, immune, musculoskeletal, developmental and
                                                                                                                                                                                                                                            treating, or
                                                                                                  DAM;
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                                                                                                                                                                                                                       Isolated polynucleotide encoding extracellular matrix or adhesion-associated protein (EXMAD) useful for diagnosing, tre preventing disorders associated with expression of EXMAD such proliferative, immune and genetic disorders
                                                                                                  MR,
                                                                                                  Baughn
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Conservative:
Mismatches:
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11-MAY-1999;
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The invention relates to human secreted or transmembrane protein (1), their fragments and is encoded by specific complementary deoxyribonucleic acid (cDNA) inserts (11), where the protein is substantially free from other mammalian proteins. (1) are useful for preventing, treating or meliorating a medical condition, especially immunological treatment or prevention of tumours. (1) exhibits activity relating to angiogenesis, cytokine, cell proliferation, cell differentiation, antinflammatory, stem cell growth factor activity and activin or inhibin-related cytokine, cell proliferation, cell differentiation or inhibin-related contise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or cells damaged by illness, autoimmune disease, accidental damage or cells disorders. (1) induces the proliferation of neural cells and cells and peripheral nervous system diseases and neuropathies, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis. (1) is involved in chemotactic or chemokinetic activity, regulation of hamalopolesis and is useful for treating myeloid con lymphoid cell disorders, platelet disorders such as thrombocytopaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders or periodontal disease. (1) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodefliciency (SCID), bacterial or fungal infections,
    protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
immunostimulant; antiparasitic; secreted protein; transmembrane protein cytokine; cell proliferation; cell differentiation; autoimmune disease; stem cell; growth factor; nervous system disease; neuropathy; Alzheimer's disease; Parkinson's disease; Huntington's disease; osteoporosis; severe combined immunodeficiency; SCID; infection; multiple sclerosis; rheumatoid arthritis; gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,
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Spaulding V;
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MCCOY J M.
LAVALLIE E R.
COLLINS-RACIE L
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MERBERG D
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                                                                                                                                          Homo sapiens.
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such as asthma or other respiratory problems. (II) is useful to express recombinant protein, as markers for tissues in which the corresponding protein is preferentially expressed and in gene therapy. The present diabetes mellitus, myasthenia gravis, allergic reactions and conditions,

Sequence 2929 BP; 901 A; 699 C; 692 G; 637 T; 0 other;

sequence is that of a polynucleotide of the invention

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                                                                                                         21 AlaAsnGluGlnAsnLeuLysAspLeuGlnAspLeuHisLysAspAlaGluAsnArgThr
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      Length:
Matches:
Conservative:
Mismatches:
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Secreted protein; human; nutritional supplements; immune stimulant; immune suppressor; haematopoiesis regulator; tissue growth; chemotaxis; activin/inhibin; chemotinesis; haemostasis; thrombolysis; receptor/ligand activity; anti-inflammatory; tumour inhibitor; cadherin/tumour invasion suppressor; ds.
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AsnThrargGluGluGluGlnGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrp
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Treacy M;
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97US'-0868696.
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04 - JUN - 1997;
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04-JUN-1997;
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 ProGlyProProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGly

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This sequence encodes a human secreted protein of the invention.
This DNA sequence was isolated from a human adult brain cDNA
Library, and was designated clone bv227_1. The DNAs and proteins
are preddicted to have biological activities which would make them
suitable for treating, preventing or ameliorating medical conditions in
humans and animals, although no supporting data is given. Suggested
activities include nutritional sources or supplements, immune
stimulating or suppressing activity, heematopoiesis regulating activity,
classue growth activity, activity, heemostatic and thrombolytic activity,
chemotactic/chemokinetic activity, hemostatic and thrombolytic activity,
receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
invasion suppressor activity, and tumour inhibition activity. The DNAs
are also stated to be useful for gene therapy, A host cell transfected
with the DNA, or its subfragments and variants is useful for recombinant
production of the human secreted protein clones.
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                                                                       New polynucleotides encoding secreted human proteins - derived from human foetal brain, adult brain, foetal kidney, adult ovary, adult retina, adult placenta or adult uterus cDNA libraries
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P-PSDB; AAW73628.
                                                                     New polynucleotides
human foetal brain,
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                                 PheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGlyProArgGlyLeuPro
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Note: The sequence data for this patent did not form part of the printed
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Yang Y,
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Xue AJ,
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Wang Z, Wehrman T, Xi
Zhou P, Goodrich R,
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2000US-052312.
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Best Local Similarity:
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Human; angiogenesis; PRO protein; cardiovascularisation; wound; atheroscieroslis; cardiac hypertrophy; gene therapy; endothelial cardiant; cytostatic; antiangiogenic; hypotensive; vulnerary; antiarteriosclerotic; gene; ss.
                         440 lAsnAsnPheIleCysGluLysAspArgGluThrValLeuSerSerAlaLeu
                                                                                                 Human angiogenesis related cDNA PRO7223 SEQ ID NO:
                                                          ABL95574 standard; cDNA; 2005
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2001US-0767609.
2001US-0796498.
2001WO-US06520.
2001US-0802666.
2001US-0808689.
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2000US-222695P.
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                                                                                   (first entry)
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(GERB/) GERBER H.
(GERR/) GERRITSEN M E.
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FERRARA N.
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28-FEB-2001;
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09-MAR-2001;
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10-MAY-2001;
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The present invention provides the protein and coding sequences of human PRO proteins. These are useful for treating or diagnosting a cardiovascular, endothelial or angiogenic disorder, including cardiac hypertrophy, trauma, cancer, age-related macular degeneration, atherosclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, mycoardial infarctions, thrombophlebitis, lymphanditis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The present sequence is a coding sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   One hundred and eighty seven nucleic acids encoding PRO polypeptides, useful in diagnosis and treatment of cardiovascular (e.g. myocardial infarction), endothelial or angiogenic disorders in a mammal -
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                                                                                                                                                                                                                                                 Baker KP, Ferrara N, Gerber H, Gerritsen ME, Goddard A;
Godowski PJ, Gurney AL, Hillan KJ, Marsters SA, Pan J,
Stephan JF, Watanabe CK, Williams PM, Wood WI, Ye W;
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             GODOWSKI P J.
GURNEY A L.
HILLAN K J.
MARSTERS S A.
                                                                                              PAN J.
PAONI N F.
STEPHAN J F.
WATANABE C K.
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P-PSDB; ABB95436.
GODDARD A.
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Best Local Similarity:
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Human PRO7223 cDNA sequence SEQ ID NO:27
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          CTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGTCCACCG
                                  SerGlyAlaValValProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsn
                                                                                                                                              GluIlePheGluAspAlaLysLeuPheCysGluAspLysSerSerHisLeuValPheIle
                              LysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGly
                                             ProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySerGln
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Human; anglogenesis; cardiant; cytostatic; antianglogenic; hypotensive; vulnerary; antiarteriosclerotic; PRO agonist; PRO antagonist; trauma; gene therapy; cardiovascular disorder; endothelial disorder; cancer; anglogenic disorder; cardiac hypertrophy, atherosclerosis; hypertension; age-related macular degeneration; arterial restenosis; angina; themmatolic arthritis; mycoardial infarction; thromopophiabitis; tumour anglogenesis; breast carcinoma; liver carcinoma; wound healing; chromosome mapping; gene mapping; gene; ss.
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J, Hillan KJ, Marsters SA, Pan J,
EK, Williams PM, Wood WI, Ye W;
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2000US-219556P.
2000US-220664P.
2000US-220664P.
2000US-222655P.
2000US-222655P.
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2001WO-US17800
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Watanabe CK,
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P-PSDB; ABB84830.
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17-AUG-2000;
24-AUG-2000;
07-SEP-2000;
18-SEP-2000;
18-SEP-2000;
24-OCT-2000;
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28-FEB-2001;
28-FEB-2001;
01-MAR-2001;
09-MAR-2001;
22-MAR-2001;
05-AR-2001;
01-MAY-2001;
10-MAY-2001;
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01-DEC-2000;
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20-DEC-2000;
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08-NOV-2000;
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activities, and can be used in gene therapy. The PRO polynucleotides, proteins, agonists and antagonists are useful for treating or diagnosing a cardiovascular, endothelial or angiogenic disorder in a mammal, e.g. cardiac hypertrophy, trauma, cancer, age-related macular degeneration, therosoclerosis, hypertension, arterial restenosis, rheumatoid arthritis, angina, mycoardial infarctions, thrombophlebitis, rhomphangitis, tumour angiogenesis (such as breast carcinoma and liver carcinoma) and wound healing. The PRO polynucleotides have applications in molecular biology, including use as hybridisation probes, and in chromosome and gene mapping. ABLB8259 to ABLB8267 represent primers and probes used in the exemplification of the present invention.
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angloplasty;
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                   PheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGlyProArgGlyLeuPro
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Matches:
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Query Match:
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Human; scavenger receptor; SRCL-P1; macrophage; basal immunity;
arteriosclerosis; diabetes; bacterial infection; restenosis; angioplasty;
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                           GlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsn
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                                                                                                                                                                                                                  New Scavenger receptor proteins SRCL-P1 with collectin-like structure, useful for treatment and diagnosis of diseases associated with oxidized low-density lipoprotein accumulation
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Matches:
Conservative:
Mismatches:
Indels:
/product= "scavenger receptor"
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P-PSDB; AAG63350.
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Best Local Similarity:
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10-OCT-2000;
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Pred. No.:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving to restore normal activity of (II) or to treat disease states involving a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in casponsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and diagnostic coding sequences of fate invention.

Sequences AAS6419-AAS4564 represent novel human diagnostic coding sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
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                                                       forensic;
                                                       Human; chromosome mapping; gene mapping; gene therapy; forensic;
food supplement; medical imaging; diagnostic; genetic disorder;
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DNA encoding novel human diagnostic protein #6937
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Best Local Similarity:
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Cellular stress response protein; CSR1; CSR2; CSR3; human; macrophage; scavenger receptor protein; intracellular stress; arteriosclerosis; diabetic circulatory obstruction; microbial infection; ss.
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LysGlyProProGlyProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsn
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                                    ProproGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGluArg
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This sequence encodes the human cellular stress response 1 (CSR1) protein of the invention. The CSR proteins are macrophage scavenger receptor proteins. The CSR proteins can be used in the treatment, gene therapy and diagnosis of diseases in which intracellular stress is important, such as arteriosclerosis, diabetic circulatory obstruction, and microbial infection. Expression of the proteins is induced in vivo in response to
                                                                                                                                  1618 GGCCCCCTGGGACCCCAGGGTCCTCAGGGGCAACCTGGAGAGGCCGGGCCTGTGGGAAA 1677
                                                                                                                                                                                                                                                                                         1840 CCGGGAATTGCAGGGAAGACAGGTCACCAGGCCAGCGGGGGGCCATGGGGGCTAAGGGT 1899
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                                                         AGGGCCCTGTTGCCCTCGAGGGTTCCCAGGCCTCAAAGGCCAGAGGCCAGCTTTGGA 1737
1498 CGCAATGTCACCATCCTACGAGGTGCCCCCGGCCCTCCAGGACCAAGAGGATTCAAAGGA 1557
                                                                                                                                                                                                                                                                   SerGlnGlyProLysGlySerArgGlySerProGlyLysProGlyProGlnGlyProSer 238
                                                                                                                                                                                                                                                                                                                                            GlyAspProGlyProProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyPro 258
                                                                                                              ------LysGlyGluProGlyProProGlyProAlaGlyGlu 198
                                                                                                                                                                                          ArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGly 218
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                                       SerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGlu--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human CSR1 protein coding sequence,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71 HisLeuArgThrLeuThrSerAsnLeuAsnGluValArgThrThrCysThrAspThrLeu
                                                                                                                                                                                                                                                                                                                                      Scavenger receptor proteins - for treatment and diagnosis of disorders involving cell stress
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3685 BP; 901 A; 1142 C; 972 G; 669 T; 1 other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches:
Conservative:
Mismatches:
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                                                                                                                                                                                                                                                                                                                                                                                              Claim 6; Page 142-150; 175pp; Japanese.
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682.00
62.42%
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                                                                                                                                                                    97JP-0233396
                                                                                                                                                  98JP-0230121
                                                                                                                                                                                                         (NISB ) JAPAN TOBACCO INC.
                                                                                                                                                                                                                                           Nakamura Y, Tokino T;
                                                                                                                                                                                                                                                                               WPI; 1999-181032/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                    P-PSDB; AAY00994
Homo sapiens.
                                 WO9909159-A1
                                                                                                                                                                    13-AUG-1997;
                                                                                                            12-AUG-1998;
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                                                                                                                                                30-JUL-1998;
                                                                     25-FEB-1999
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                                                                                                                                                                                                                                                                                                                                                                                    111 SerValSerLeuArgMetGlnGlnAspLeuMetArgSerArgLeuAspThrGluValAla 130
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                                                                                                                                                                                                                    31 AspLeuHisLysAspAlaGluAsnArgThrAlaIleLysPheAsnGlnLeuGluGluArg 50
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                     Sequence 3810 BP; 892 A; 1213 C; 1049 G; 655 T; 1 other;
                                                                                                                                             US-09-763-712A-2_COPY_91_547 (1-457) x AAX27856 (1-3810)
                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
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Search completed: March 21, 2003, 08:38:02 Job time : 262.038 secs

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APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT STREET: 4 Embarcadero Center, Suite 3400 CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA

COMPUTER READABLE PORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/642,255
                               US-09-484-970B-4
US-09-029-348-20
US-08-249-200-5
US-08-249-200-5
US-09-453-702B-264
US-09-453-702B-62
US-09-453-702B-62
US-09-453-702B-62
US-08-393-367B-1
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US-08-393-367B-1
US-08-393-36-1
US-09-320-095-9
US-09-111-470-3
US-09-111-470-3
US-09-453-702B-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFCATION: 435
ATTORNEY_AGENT INFORMATION:
NAME: ROWLAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/DOCKET NUMBER: 455556-3/BIR
TELECOMMUNICATION INFORMATION:
TELEFAX: (415) 494-8700
TELEFAX: (415) 494-8701
TELEFAX: (15) 494-8701
TELEFAX: 910 277299 FHT UR
INFORMATION FOR SED ID NO: 60: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                us-09-535-521-3
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392
48908
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                                                                                                                   March 21, 2003, 08:26:21; Search time 48.552 Seconds
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1: /cgn2_6/ptodatca1/ina/5A_COMB.seq:*
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5: /cgn2_6/ptodatca1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodatca1/ina/PcTUS_COMB.seq:*
          GenCore version 5.1.4\_p5\_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                  OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                    of hits satisfying chosen parameters:
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US-09-029-348-19
US-08-159-784-1
US-09-297-269-39
US-08-555-669-11
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US-08-655-086-1
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Listing first 45 summaries
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Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Maximum DB seq length: 200000000
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Mismatches:
Indels:
                                                                                                                                                  Length:
Matches:
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Patent No. 5812089
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: GRUSKIN, ELLIOTT A.
APPLICANT: ZHANG, GUANGHUI
APPLICANT: ZHANG, GUANGHUI
MUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: DILWORTH & BARRESE
STREET: 333 EARLE OVINGTON BOULEVARD
CITY: UNIONDALE
STATE: NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  316 -----AlaProGluAspAsnGlyCysPro 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 592 CCTGGTGCTCCGGGACCTGCAGGCCCACCG 621
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459.50
53.16%
48.95%
18.23%
810 base pairs
             nucleic acid
EDNESS: double
                                                 linear
                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
            TYPE: nucleic STRANDEDNESS:
TOPOLOGY: line
                                                                                                                                 Alignment Scores:
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                                                                  Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels:
                                                                           ....еж: US/08/655,086
03-JUN-1996
N: 435
                               COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                              ATTORNEY AGENT INFORMATION:
NAME: STEEN, JEFFREY S.
REGISTRATION NUMBER: 32,063
REFERENCE/DOCKET NUMBER: 203-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 516-228-8484
TELEFAX: 516-228-8516
INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.58e-17
452.50
52.118
46.48%
17.96%
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                     LENGTH: 3181 base pairs
TYPE: nucleic acid
                                                                              CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 03-JUN-199
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                      unknown
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Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
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399 241 261

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205 AlaGlyProProGlyGluArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGly 224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282 LeuProGlyValProGlyMetProGlyProLysGlyProProGlyProProGlyProSer 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       302 GlyAlaValValProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsnGly 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145 LysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyProProArgGly 164
                                      165 ProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLys 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   165 ProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLys 184
                                                                                                                                                                       185 GlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGlyProIleGlyPro
                                                                                                                                                                                                                 220 GCGCCTGGACCGGCTGGTCCACCGGGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCT
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Indels:
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Matches:
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TITLE OF INVENTION: NOVEL PROCOLLAGENS
FILE REFERENCE: d087857PUS LISTING
CURRENT APPLICATION NUMBER: US/09/029,348
CURRENT FILING DATE: 1998-05-07
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PATENTIN VGT: 2.0
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47.06%
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Query Match:
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   316
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   -----AlaValValProLeuAlaLeuGlnAsnGluProThrProAla----
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                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: CAPPELLO, Joseph
APPLICANT: CAPPELLO, Joseph
APPLICANT: FERRARI, Franco A.
TITLE OF INVENTION: High Molecular Weight Collagen-Like
TITLE OF INVENTION: Protein Polymers
NUMBER OF SEQUENCES: 135
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT STREET: 4 Embarcadero Center, Suite 3400 CITY: San Francisco STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:

SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/642,255
FILING DATE:
CLASSIFICATION: 435
ATTONNEY/AGENT INFORMATION:
NAME: ROGILAND, Bertram I.
REGISTRATION NUMBER: 20,015
REFERENCE/POCKET NUMBER: A55556-3/BIR
TELECOMMULCATION INFORMATION:
TELECOMMULCATION INFORMATION:
TELEFRAM: (415) 494-8711
TELEFRAM: (415) 494-8771
TELEFRAM: 010 277299 FHT UR
INFORMATION FOR SEQ ID NO: 50:
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Conservative:
Mismatches:
Indels:
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DESCRIPTION: /desc = "synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                     Sequence 50, Application US/08642255
Patent No. 5773249
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448.50
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LENGTH: 756 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
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US-08-642-255-50
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238 ------SerGlyAspProGlyProProGlyProProGlyLySGlu 250
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-----AlaGlyGluArgGlyProIleGlyProAla 205
                                                                                                                                                                             GlyProProGlyGluArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySer 225
                                                                                                                                                                                                 237
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                                                                                                                                                                                                                                                                                                                                                                             251 GlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGlu 270
                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                303 ---AlaValValProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsnGly 321
                                             185 GlyGluLysGlyGluProGlyProProGlyPro------
                                                                238 CAGTATGATGGAAAAGGAGTTGGACTTGGCCCTGGACCAATGGGCTTAATGGGACCTAGA
                                                                                                                                                                                                                                            226 ArgGlySerProGlyLys------
                                                                                                                                                                                                                                                                658 GGTCCTAGGGGCCCTGCTGGTCCTTCTGGCCCTGGAAAAAAAGATGGTCGCACTGGACAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/08159784
Patent No. 5643783
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: NOVEL COLLAGEN AND USES THEREOF NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                           271 ProGlyValProGlyProArgGlyLeuPro-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: Boston
STATE: Massachusetts
COUNTR: U.S.A.
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOSTWARE: WORDEFIECT (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,784
FILING DATE: December 1, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           293 GlyProProGlyProProGlyProSerGly-----
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
US-08-159-784-1
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1087 CCTGCTGAAGATGGGAGACCGGTGACACTGGACCTCAAGGCTTTCCAGGGACCCCAGGA 1146
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180 AsnLysGlyGlnLysGlyGluLysGlyGluPro--------GlyProProGly 194
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Conservative:
Mismatches:
Indels:
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                                                   00246/170001
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        ATTORNEY/AGENT INFORMATION:
NAME: John F. Freeman
REGISTRATION NUMBER: 29,066
REFERENCE/DOCKET NUMBER: 0024/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
                                                                                                                                                                                                                                    1.07e-15
428.00
46.41%
40.08%
16.98%
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                                                                                         TELEFAX: (617) 542-890
TELEX: 200154
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                             LENGTH: 4031
TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                      ; TOPOLOGY: linear
US-08-159-784-1
                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
FILING DATE:
                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                              Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                     161
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943 CCCGCTAGAAACTGCAGAGACCTGAAATTCTGCCATCCTGAACTCAAGACTGGAGAATAC 1002
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                                                                                                                                                                       -----ProThrProAla 316
                                                                                                                                                                                                                                                                                                                                                                                                       331
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      286
                                                                  655 CCACCAGGGCCTCGAGGTAACAGAGGTGAAAGAGGATCTGAGGGCTCCCCAGGCCACCCA 714
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                                                                                                                                    287 GlyMetProGlyProLysGlyProProGlyProProGlyProSer-----Gly
      -- ArgGlyLeuProGlyLeuProGlyValPro
                                                                                                                                                                                                                                                                                                                                    775 GCCGCTGCCATTGCTGGGATTGGAGGTGAAAAAGCTGGCGGTTTTGCCCCCGTATTATGGA
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APPLICANT: Brewton, Richard G.
APPLICANT: Brewton, Richard G.
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESSS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----LeuPheCysGluAspLys----
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                                                                                                                                                                                                                                                                  303 AlaValValProLeuAlaLeuGlnAsnGlu----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 11, Application US/08555669 Patent No. 5773248
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 2243 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Halluin, Albert P.
REGISTRATION NUMBER: 25,227
REFERENCE/DOCKET NUMBER: 83
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-3660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
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   273 ValProGlyPro
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                                                                                                            Sequence 39, Application US/09297269

Sequence 39, Application US/09297269

Patent No. 6451557

GENERAL INFORMATION:

APPLICANT: GALANIS, Maria

APPLICANT: GALANIS, Maria

APPLICANT: RAMEHAW, John A.M.

APPLICANT: RAMEHAW, John A.M.

TITLE OF INVENTION: METHOD FOR PRODUCING, IN YEAST, A HYDROXYLATED TRIPLE

TITLE OF INVENTION: METHOD FOR PRODUCING, IN YEAST, A HYDROXYLATED TRIPLE

TITLE OF INVENTION: METHOD (AS Amended)

TITLE OF INVENTION: METHOD (AS Amended)

FILE REFERENCE: Q54094

CURRENT APPLICATION NUMBER: US/09/297,269

CURRENT APPLICATION NUMBER: P03310

EARLIER APPLICATION NUMBER: P04316

EARLIER FILING DATE: 1996-10-29

EARLIER FILING DATE: 1996-12-19

EARLIER FILING DATE: 1997-10-29

EARLIER PILING DATE: 1997-10-29

SOFTWARE: PALENTING DATE: 1997-10-29

NUMBER OF SEQ ID NOS: 42

SOFTWARE: PALENTIN ON SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   172 -------GlnGlyProProGlyProThrGlyAsnLysGlyGlnLys 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199 ArgGlyProlleGlyProAlaGlyProProGlyGluArgGlyGlyLysGlySerLysGly 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233 GlyProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGluGlyLeu 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         294
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253 ProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGly 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134 VallleMetGluGluMetLysLeuValAspSerLysHisGlyGlnLeuIleLysAsnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154 ThrIleLeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySer----
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1615 GGGCCAGTTGGACCCCCAGGACCTCCAGGGCCTCCAGGGCCACCAGGACCA 1665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-763-712A-2_COPY_91_547 (1-457) x US-09-297-269-39 (1-1572)
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119
25
108
88
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Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.33e-16
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42.48%
35.10%
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
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                                                                                                 US-09-297-269-39
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DB:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    475
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			31y 161     	Lys 181      AAG 1090	Pro 201		Lys 223 	Pro 243	31y 263    -  3GT 1390	270 FCT 1450	270 ·		31Y 28/      	288 2TG 1630	288	rrg 1690	ser 301 CCA 1750	313 3AG 1810
	2543 121 121 36: 26 38: 176	5-669-11 (1-2543)	ValaspSerLysHisGlyGlnLeulleLysAsnPheThr1leLeuGlnGlyProProGly :::	ProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLyS :::	GlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAlaGlyGluArgGlyPro    ::::::     GAGAACGGGCAGAGCTGGGAGCTGAGGCGGGCCCTTTTGAGAGAGA	IleGlyProAlaGlyProProGlyGluArgGlyGlyLySGlySerLySGlySer	GCCTCGGCCCACAAGGCCCTCCGGAGCCCCTGGTCCGAGGCTTCCAGGGCCAGAAG	GlySerArgGlySerProGlyLysProGlyProGlnGlyProSerGlyAspProGlyPro	ProglyProProglyLysgluglyLeuProglyProglnglyProProglyPheGlngly	LeuglnGlythrValglyGlu		GGCAGTCGAGGGGACCCCAAAGGCACCCAGGGTCCCAACGCACCAGGTGTT	CAGGGTGCCCGGGCCCCCCGGTCCTCTGGGGCGTCCCGGGGTTTCCTGGC	Met		TGTGGGGGGATGATCAGCGAACAAATTGCACAGTTAGCCGCGCACCTAAGGAAGCCTTTG	GCACCCGGGTCCATTGGTCGGCCCGGTCCAGCCCCCCTGGGCCCCCAGGACCCCA	GlyAlaVal-ValProLeuAlaLeuGlnAsnGluPro
	1.5 Length: Matches: Conservative Mismatches: Indels: Gaps:	(1-457) x US-08-555	InLeuIleLysAsnPheTh :: :GGCTGGTCGCAAC	spargGlySerGlnGlyPr      GCCGGGCCTCCTGGACG	LyGluProGlyProProGl         sggagcrgggrgaggccgc	coGlyGluArgGlyGlyLy 	TCCCGGAGCCCCTGGTGT	YLysProGlyProGlnGl 	GluGlyLeuProGlyProGl          SAAGGCCCTAAGGGAGACCA	.u		SCCCCAAAGGCACCCAGGG	ociyrroargelyneurr           cgrccrcrescreca	TCCGGGGAAGGAGGCCAG		ACAAATTGCACAGTTAGC	ProGlyProLysGlyPr 	NateuGlnAsnGluPro-       ::::::     cccrccAccccccc
STRANDEDNESS: unknown TOPOLOGY: unknown MOLECULE TYPE: CDNA FRATURE: NAME/KEY: CDS LOCATION: 47.2098	Alignment Scores: 2.11e-15 Pred. No.: Score: 419.00 Percent Similarity: 35.59% Best Local Similarity: 19.30% Query Match: 16.63%	US-09-763-712A-2_COPY_91_547	ValaspSerLysHisGlyGlnLeulleLysAsnP :::    ::      ::     : CTCGATGGCCAGAAGGGAGGCTGGTCGCAAC-	ProArgGlyProArgGlyAs :::       GAGAAGGGCCCCAACGGGC	GlyGlnLysGlyGluLysG     :::::     GGAGAACGGGCAGAGCTGC	IleglyProaladlyProProGlyGluargGlyGlyLyLySGlySerLySGlySer 	GCCCTCGGCCCACAAGGCCC	GlySerArgGlySerProGl          GCAGCATGGGAGACCCCG	ProGlyProProGlyLysG]           CGGGGTCCGGGAGGTGCCG	LeuGlnGlyThrValGlyGlu       TTCCTGGGGATAAAGGAGAA		GGCAGTCGAGGGGAGCTGGC	CAGGGTGTCCCCGGGCCCC	Met		TGTGGGGGATGATCAGCG	GCACCCGGGTCCATTGGTCC	GlyAlaVal-ValProLeuAlaLeuGlnAsnGluPro     ::::::                 GGCTCCATTGGTCACCCTGGCTCGAGGACCCCCG
STRANDEDN  TOPOLOGY:  MOLECULE TX  FEATURE:  NAME/KEY:  LOCATION:  US-08-555-669-11	Alignment Scores Pred. No.: Score: Percent Similari Best Loca Simil Query Match: DB:	us-09-763-	Qy 142 Db 986	Qy 162 Db 1031	Qy 182 OD 1091	202	Oy 220 Db 1211	Qy 224 0	Qy 244 Db 1331	Oy 264 :		1451		Oy 288 DD 1571	Оу 288	Db 1631	Oy 289 Db 1691 (	Oy 302 (

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72 GCCTCCCGGAGATCCTGGGCTTCCAGGTGCCATTGGGGCCCCAGGGGACACCGGGGGATCTG 2031
                                                                                                                                                                                                                           51 uAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIleLysLy 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 pAsnTrpGlyHisGlyHisGlyProGly------420
14 -----ThrProAlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 331
                                                                                       31 pLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGl 351
                                                                                                                                                                                                                                                                        71 sGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArgGluAsnGl 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Mayne, Richard G.
APPLICANT: Mayne, Richard G.
APPLICANT: Mayne, Richard
APPLICANT: Mayne, Richard
TITLE OF INVENTION: TYPE IX COLLAGEN AND FRAGMENTS THEREOF
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSE: McGregor & Adler, LLP
STARE: McGregor & Adler, LLP
STARE: 1 PAXAS
COUNTY: USA
ZIP: 77071
COMPUTER: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPPERATING SYSTEM: Macintosh
SOFTWARE: Microsoft WORD for Macintosh
CURRENT APPLICATION NUMBER: US/09/073,663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32 CGACACCTCAGCCTGCCAAGGAGCCGTGTTAGGAGGG 2068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 -----GluAspCysAlaGlyLeuIleTyrAlaGly 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: BEGJARMIN AACON AGLEr, Ph.D., J.D.
REGISTRATION NUMBER: 35,423
REFERENCE/DOCKET NUMBER: D5913D
TELECOMMUNICATION INFORMATION:
TELEPRAN: (713) 777-2321
TELEPRAN: (713) 777-6908
WFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nce 11, Application US/09073663
t No. 6127523
RAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 2543 base pairs
TYPE: nucleic acid
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
LOCATION: 47..2098
73-663-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: unknown LECULE TYPE: CDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73-663-11
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Oy 351 uAspLysSerSerHisLeuValP  Db 1860	391 1913	411 pAsnTr 1972 GCCTCC		RESOLT 9 US-08-642-255-48 ; Sequence 48, Application US/086. ; Patent No. 577349	APPLICANT: CAPELLO, JOSEPH APPLICANT: FERRARI, Franco ; TITLE OF INVENTION: High MO, MITTER OF INVEN			ZIP: 94111-4187 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC COMPATID	CURRENT APPLICATION DATA:  CURRENT APPLICATION DATA:	APPLICATION NUMBER: US/08, FILING DATE: CLASSIFICATION: 435 ATTORNEY/AGRIT INFORMATION: ANAMAN POSTATION: ANAMAN POSTATI	REGISTRATION NUMBER: 20, 0 REFERENCE/DOCKET NUMBER: 20, 0 REFERENCE/DOCKET NUMBER: 1 TELECOMMUNICATION INFORMATION	TELEPHONE: (415) 494-8/U0  TELEFAX: (415) 494-8/T1  TELEX: 910 277299 FHT UR  TAMENDAMMING FOR TEN OF	INFORMATION FOR SEQ 1D NO: 40 SEQUENCE CHARACTERISTICS: LENGTH: 432 base pairs	TYPE: nucleic acid ; STRANDEDNESS: double ; TOPOLOGY: linear . MOTEGITE myne. Athor moles.	DESCRIPTION: /desc = "syn US-08-642-255-48	Alignment Scores: 7.77e-16 Pred. No.: 7.77e-16 Score: 412.50 Percent Similarity: 55.70%	Best Local Similarity: 53.69% Query Match: 16.37% DB:
Alignment Scores: 2.11e-15 Length: 2543 Score: 419.00 Matches: 121 Percent Similarity: 35.59\$ Conservative: 26 Best Local Similarity: 29.30\$ Mismatches: 91 Query Match: 3 Gaps: 9 Gaps: 9 Gaps: 9	SHisGlyGlnLeulleLysAsnPheThrlleLeuC::     ::: 	Oy 162 ProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsnLys 181	QY     182 GlyGlnLysGlyGlubroGlyProProGlyProAlaGlyGluargGlyPro     201       III::::::	Oy 202 IleGlyProAlaGlyProFroGlyGluArgGlyGlyLySGlySerLySGlySer 219	Qy 220GlnGlyProLys 223  Db 1211 GCCTCGGCCCACAAGGCCCTCCCGGAGCCCTGGTGTCCGAGGCTTCCAGGGCCAGAAG 1270	Oy 224 GlySerArgGlySerProGlyLysProGlyProGlnGlyProSerGlyAspProGlyPro 243	Oy 244 ProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGly 263	Qy 264 LeuGlnGlyThrValGlyGlu	270	Db 1451 GGCAGTCGAGGGGAGCTGGGCCCCAAAGGCACCCAAGGGTCCCAACGGCACCAGGGGTGTT 1510  Qy 271ProGlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGly 287  Ob 1511 CAGGGGGGGCGCCACAGGGGGGGGGGGGGGGGGGGGG	288 Metroroccosoccoccosoccoccosoccosoccosoccos	288	1631 TGTGGGGGGATGATCAGCGAACAAATTGCACATTAGCCGCGCACCTAAGGAAGCCTTTG	<pre>Qy 289</pre>	Qy 302 GlyAlaval-valProLeuAlaLeuGlnAsnGluPro	Qy 314ThrProalaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAs 331	Oy 331 pLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGl 351 Db 1833
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PEDUTY 9  US-08-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-25-48  18-68-642-642-25-48  18-68-642-642-65-648-68-68-68-68-68-68-68-68-68-68-68-68-68
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198 GluArgGlyProIleGlyProAlaGlyProProGlyGluArgGlyGlyLySGlySerLys 217
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                                                               10 GGCCCAGCAGGTCCGAAGGGCGCGCATGGCCCAGCAGGCCCGAAAGGTGCGCCTGGACCG
                                                                                                                                                                                                                                                                          292 CCACCG-----GGTGCTCCGGGACCTGCAGGCCCGCCAGGTGCGCCTGGACCGGCT
                                 158 GlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyPro
                                                                                                                                                                                                                                                                                                                                                                                              ProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyValProGlyProArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    278 GlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGlyProProGlyPro
US-09-763-712A-2_COPY_91_547 (1-457) x US-08-642-255-48 (1-432)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Bjorn R. Olsen
TITLE OF INVENTION: NOVEL COLLAGEN AND USES THEREOF
NUMBER OF SEQUENCES:
CORRESPONDENCE S:
ADDRESSE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Mass...
COUNTRY: U.S.A.
ZIP: 02110-2804
COMPUTER READBLE FORM:
MEDIOM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 502 or 55SX
OPERATING SYSTEM: MS-DOS (Version 5.0)
SOFTWARE: WordPerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,784
***TITING DATE: December 1, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               00246/170001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         298 ProGlyProSerGlyAlaValValPro 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           403 AAAGGAGCTCACGGTCCGGCAGGTCCG 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/08159784 Patent No. 5643783 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: JOIN F. Freeman
REGISTRATION NUMBER: 29,066
REFERENCE/DOCKET NUMBER: 0024(
TELECOMMUNICATION INFORMATION:
TELEX: 200154
INFORMATION FR. 542-8906
INFORMATION FR. 200154
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: December
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 3394
TYPE: nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Reeders, Stephen T., Morrison, Karen E., Hudson, Billy APPLICANT: G.
                                                                                                                                                                                                                                                                                                                                                                                                    172 ------TlnGlyProProGlyProThrGlyAsnLysGly
                                                                                                                                                                                                                                                                                             613 AGCAATGTGTTTGCTGAGTCCAGCCGCCCCGGGCCTCCAGGATTGCCAGGGAATCAG---
                                                                                                                                                                                                                                                                                                                            ------GGCCCTCCAGGACCCAAGGGCCCCAAAGGAGAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----ProGlyLysProGlyProGlnGlyProSerGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240 AspProGlyProProGlyProProGlyLysGlu-------GlyLeuProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                             211 ArgGlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySer----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-763-712A-2_COPY_91_547 (1-457) x US-08-159-784-4 (1-3394)
                                                                                                                                                                                                        156 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySer----
                                                                        3394
86
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TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen
TITLE OF INVENTION: Polynucleotides
NUMBER OF SEQUENCES: 23
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: Connecticut
COUNTRY: U.S.A.
ZIP: 06510
COMPIER READBLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 800K storage
                                                                                                     Conservative:
Mismatches:
Indels:
                                                                         Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                    203 GlyProAlaGlyProProGlyGlu------
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Yale University STREET: 246 Church Street
                                                                        1.03e-14
409.00
48.98%
43.88%
16.23%
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-159-784-4
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                                                                                                                   Best Local Similarity:
Query Match:
                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: New STATE: CO COUNTRY:
                                                             Alignment Scores:
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No.:
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350 CysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGlnTrpIle 369
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                                                                                                                                                                    ProProGlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGluPro 313
                                                                                                                                                                                            314 ThrProAlaProGluAspAsnGlyCysPro------ProHisTrpLysAsnPhe 329
                                                                                                                                                                                                                                                                                                                                                                             708 ACC---ACCTGCAGCAGGGGCAGTGATGAGGGGCTTTGTCTTTACCCGGCACAG----- 758
    254 GlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGlyVal 273
                                                                                                                                                                                                                                                                                             652 GGACCA---CCTGGATCCGATGGCCTGCCAGGCTTGAAGGGGAAACC-TGGAGACACTGG 707
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                                                                                    274 ProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGly
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                                                                                                              GGAAGCCCAGGCCCACCTGGTTCAGCTGGAGAACCAGGGATGCAAGGAGAACCCGGGCCC
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APPLICANT: Morrison, Karen E
APPLICANT: Morrison, Karen E
APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REFERENCE: 951263A
CURRENT APPLICATION NUMBER: US/08/399,889B
EARLIER APPLICATION NUMBER: 07/621091
EARLIER PILING DATE: 1990-11-30
NUMBER OF SEQ. ID NOS: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-763-712A-2_COPY_91_547 (1-457) x US-08-399-889-1 (1-1416)
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Mismatches:
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Matches:
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402.50
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US-08-399-889-1
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Best Local Similarity:
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LOCATION: (1)
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LENGTH: 1416
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLys 231
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Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                    CLASSIFICATION: 424
PRIOR APPLICATION DATA: No. 5424408 applicable ATTORNARY AGENT INFORMATION:
NAME: BATCH, RICHARD S.
REGISTRATION NUMBER: 28180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHROMOSOME/SEGMENT: NO. 5424408 known PUBLICATION INFORMATION: NO. 5424408e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5424408 known
                         SOFTWARE: Microsoft Word 5.1a
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/621,091G
FILLING DATE: 11/30/90
                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 900983/RB
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 972-1400
TELEFAX: (212) 370-1622
                     Macintosh OS7.0
                                                                                                                                                                                                                                                                                                          TELEX: 236268
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1416 base pairs
TYPE: Nucleic acid
STRANDEDNESS: Double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INDIVIDUAL ISOLATE: Unknown
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintos
                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: Linear
MOLECULE TYPE: CDNA to mRNA
HYPOTHETICAL: NO
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LIBRARY: BOVINE lens CDNA
CLONE: KMC15
POSITION IN GENOME: No. 5424
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE:
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172 CCTCCAGGGAGTCCTGTAGAAGGCATAAAAGGAGACAAGGGGTTGATGGGAGAGCCTGGC 231
                                                                                                                    ||||||| |||||| CAAAGAGGTCACCACCTATAGGAGACATGGGGTCACCAGGTCATCCGGGAGCACCA
                                                                                              GlyGlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLys
                                                                                                                                                                232 ProGlyProGlnGlyProSerGlyAspProGlyProProGlyProFroFroGlyLysGluGly
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CCAAAAGGACCACCTGGAGTACGTGGAGAGCCTGGCACAGTGAAGATCATCTCCCTTCCA
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                               192 ProProGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProProGlyGluArg
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Patent No. 6007980

GENERAL INFORMATION:
APPLICANT: Readers, Stephen T
APPLICANT: Morrison, Karen E
APPLICANT: Hudson, Billy G
TILE REPRENCE: 951263B
CURRENT APPLICATION NUMBER: US/09/167,364
CURRENT FILING DATE: 1998-10-07
EARLIER APPLICATION NUMBER: 08/39989
EARLIER APPLICATION NUMBER: 08/39989
EARLIER APPLICATION NUMBER: 08/39989
EARLIER APPLICATION NUMBER: 08/39989
EARLIER PILING DATE: 1998-10-07
SOFTWARE: PatentIn Ver. 2.0
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NAME/KEY: CDS
LOCATION: (1).
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ThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPhe 349
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|CTCCAGGGAGTCCTGTAGAAGGCATAAAAGGAGAACAAGGGGTTGATGATGGGAGAGCCTGGC 231
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          1416
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                        Matches:
Conservative:
Mismatches:
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                                                              Indels:
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     9.63e-15
402.50
46.62%
38.72%
15.97%
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                                   Percent Similarity:
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Query Match:
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US-09-439-897-1
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Sequence 4, Application US/09484970B Patent No. 6426186 GENERAL INFORMATION:
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OTHER INFORMATION: Incyte ID No.
               370 LysLysGlnMetValGlyArgGlu--
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.99e-14
400.50
54.89%
48.91%
15.89%
                                                                      388 ArgGluAsnGluTrpLys 393
                                                                                              861 CCTGGGAACACTTGGCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                LENGTH: 4359
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US-09-484-970B-4
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APPLICANT: Hudson, Billy G
TITLE OF INVENTION: Alpha-3 Chain Type IV Collagen Polypeptides
FILE REPERENCE: 95-1263-C
CURRENT APPLICATION NUMBER: US/09/439,897
CURRENT FILLNG DATE: 1999-11-12
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                               US-09-763-712A-2_COPY_91_547 (1-457) x US-09-439-897-1 (1-1416)
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Conservative:
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Indels:
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; LOCATION: (1)..(1416)
US-09-439-897-1
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                                                                                                                           TYPE: DNA
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                          156 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArg-----
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Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                 APPLICANT: Jones, Karen A.
APPLICANT: Volkmuth, Wayne
APPLICANT: Walker, Michael G.
TILE OF INVENTION: BONE REMODELING GENES
FILE REFERENCE: PB-0014 US
CURRENT APPLICATION NUMBER: US/09/484,970B
CURRENT FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 172
SOFTWARE: PERL Program
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Matches:
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Search completed: March 21, 2003, 12:34:17 Job time : 61.552 secs

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sequence 762, App
Sequence 346, App
Sequence 3946, App
Sequence 2094, App
Sequence 2094, App
Sequence 206, App
Sequence 206, App
Sequence 22, Appl
Sequence 24, App
Sequence 448, App
Sequence 448, App
Sequence 125, Appl
Sequence 1138, App
Sequence 255, Appl
Sequence 2178, Appl
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Sequence 613, Appl
Sequence 331, Appl
Sequence 331, Appl
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COMPUTER: IBM PC compatible
CERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
US-09-919-497-6
US-09-954-456-762
US-09-954-456-782
US-09-880-107-3946
US-09-954-456-786
US-09-880-107-2094
US-10-044-090-104
US-10-0880-107-3947
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0 US-09-810-343-1516

0S-09-736-457-1138

US-09-902-941-1138

US-09-849-626-1138

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2 US-10-044-090-22
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US-10-001-887-33
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US-10-174-590-331
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US-10-175-737-331
US-10-175-737-331
US-10-175-738-331
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US-09-925-302-64
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ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
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ENCODING THEM
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Patent No. US20020065394A1
GENERAL INFORMATION:
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LaVallie, Edward R.
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Treacy, Maurice
Spaulding, Vikki
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 219
                                                                                                                                                                                                                                                                                                                                                                                   Evans, Chery
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-MODEL-framet-pln.model -DEV-xlp
-MODEL-framet-pln.model -DEV-xlp
-OGPG-2012_1/USPTO_Spool/US09763712/runat_14032003_100950_18119/app_query.fasta_1.1877
-DB=Published_Applications_NA -OFWT-fastap -SUFFIX-rnpb -MINAATCH=0.1
-LOOPCI-0 -LOOPDEXT=0 -UNITE-blts -START=1 -END-1 -MATRIX-blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE-pct -THR_MAX=100
-THR_MIN=0 -ALIGN-15 -MODE-LOCAL -OUTFWT-pto -NORM-ext -HEAPSIZE-500 -MINLEN-0
-MAXLENEX-20000000000 -USR=-US09763712_EGCN_1_1_123_Grunat_14032003_100950_18119
-NCPU-6 -LOPU-3 -NO_XLPXY -NO_MAMP -LARGEQUERY -NEG_SCORES=0 -WAIT -LONGLOG
-NCPU-6 -LOPU-3 -NO_MANP_THRADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPDP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Sequence 2274, Ap
Sequence 57, Appl
Sequence 57, Appl
                                                                                                                                                                               (without alignments)
1596.010 Million cell updates/sec
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/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/DESPUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
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Compugen Ltd.
                                                                                                             nucleic search, using frame_plus_p2n model
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US-09-954-456-2274
US-09-924-340-57
US-09-992-600A-57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of hits satisfying chosen parameters:
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                       GenCore version
Copyright (c) 1993 - 2003
                                                                                                                                                                                                                                  US-09-763-712A-2_COPY_91_547
2520
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                 US-09-763-712A-2_COPY_91_547 (1-457) x US-09-745-763-198 (1-2930)
                                                                                                                                                                                                                                              Conservative:
Mismatches:
                                                                                                                                                                                                                           Length:
Matches:
           US/09/745,763
                                                                                                                                                                                                                                                                    Indels:
                                                                                                                                                                                   NO: 198
                                                                                                                                                                                                                                                                             Gaps:
                                                     NAME: Sprunger, Suzanne A. REGISTRATION NUMBER: 41,323 TELECOMMUNICATION INFORMATION:
          APPLICATION NUMBER: US/09,
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
                                                                                   TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 198:
                                                                                                                                                           TOPOLOGY: linear
MOLECULE TYPE: cDNA
SEQUENCE DESCRIPTION: SEQ ID
                                                                                                                SEQUENCE CHARACTERISTICS:
LENGTH: 2930 base pairs
                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: double
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99.78%
99.78%
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
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                                                                                                                                                                                      GlullePheGluAspAlaLysLeuPheCysGluAspLysSerSerHisLeuValPheIle
                                                                                                                                                                                              2121 GACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGCCAGGA
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GlyProLysGlySerArgGlySerProGlyLysProGlnGlyProSerGlyAsp
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                              ProGlyProProGlyProProGlyLysGluGlyLeuProGlyProGlnGlyProProGly
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                                                                                                                                                                                                                                                                                                                                                                                                                   156 LeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGlnGlyProPro
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Mismatches:
Indels:
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Matches:
; PRIOR FILING DATE: 2000-09-27; PRIOR APPLICATION NUMBER: US/60/235,720; PRIOR FILING DATE: 2000-09-27; PRIOR FILING DATE: 2000-09-27; PRIOR FILING DATE: 2000-09-27; PRIOR FILING DATE: 2000-09-27; NUMBER OF SEQ ID NOS: 2276; SGOTTHANG DATE: 2000-09-27; SUFWARE: PATENTING DATE: 2000-09-27; SGOTTHANG DATE: 2000-09-27; SGOTTHANG DATE: 2000-09-27; SEQ ID NO 2274
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474.50
49.67%
36.27%
18.83%
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US-09-954-456-2274
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Best Local Similarity:
Query Match:
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Pred. No.:
                                                                                                                                                                              TYPE: DNA
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                                     1110 GAGCATGACTGATTCCAAGACAGAGGCAAGTTCACCTACCCCACAGGAGAGTCCCTGGT
                                                                           401 pTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGl
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Publication No. US20030027248A1

GENERAL INFORMATION:
APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US2.REG
CURRENT APPLICATION NUMBER: US/09/924,340

CURRENT FILING DATE: 2001.08-06
PRIOR PLICATION NUMBER: US 60/305,456
PRIOR PLING DATE: 2001.07-13
PRIOR PLING DATE: 2001.07-13
PRIOR PLING DATE: 2001.07-13
PRIOR PLING DATE: 2001.06-15
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Mismatches:
Indels:
Gaps:
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LOCATION: 1..475
NAME/KEY: CDS
LOCATION: 476.964
NAME/KEY: 3'UTR
LOCATION: 965..1133
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LOCATION: 1118..1133
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Best Local Similarity:
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SEQ ID NO 57
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DB:
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Publication No. US20030027161A1

GENERAL INFORMATION:

APPLICANT: Benjanin, Stephane

APPLICANT: Tanaka, Hiroaki

ITILE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

CURRENT FILING DATE: 2001-11-13

CURRENT FILING DATE: 2001-11-13

PRIOR FILING DATE: 2001-08-06

PRIOR FILING DATE: 2001-08-06

PRIOR FILING DATE: 2001-09-06

PRIOR FILING DATE: 2001-09-13

PRIOR APPLICATION NUMBER: US 60/302,277

PRIOR APPLICATION NUMBER: US 60/208,698

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-16

PRIOR FILING DATE: 2001-06-16

PRIOR FILING DATE: 2001-06-16

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-29

PRIOR FILING DATE: 2001-06-15

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---GlyAspProGlyProProGlyProPro----
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                                                                                                                                                                  235 -----GlnGlyProSer----
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FEATURE:
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LOCATION: 1..475
FEATURE:
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US-09-992-600A-57
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Mismatches:
Indels:
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Matches:
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47.468
41.538
                   NAME/KEY: 3'UTR
LOCATION: 965..1133
FEATURE:
NAME/KEY: POLYA_Signal
LOCATION: 1101..1106
                                                                                          NAME/KEY: polyA_site;
; LOCATION: 1118..1133
US-09-992-600A-57
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Best Local Similarity:
Query Match:
LOCATION: 476..964
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US-09-919-497-6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyProProGlyProArgGlyBroArgGlyAspArgGlySerGlnGlyProProGlyPro
Patent No. US20020106662A1
GENERAL INFORMATION:
APPLICANT: Mutter, George L.
TITLE OF INVENTION: PROGNOSTIC CLASSIFICATION OF ENDOMETRIAL CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-763-712A-2_COPY_91_547 (1-457) x US-09-919-497-6 (1-6158)
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130
38
76
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Matches:
Conservative:
Mismatches:
                                                       FILE REFERENCE: B0801/7225
CURRENT APPLICATION NUMBER: US/09/919,497
CURRENT FILING DATE: 2001-07-31
PRIOR PPLICATION NUMBER: US 60/221,735
PRIOR FILING DATE: 2000-07-31
NUMBER OF SEQ ID NOS: 100
SOFTWARE: Patentin version 3.0
LENGTH: 6158
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LOCATION: (2434)...(2434)
OTHER INFORMATION: n = a, c, g or t/u
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453.00
39.81%
30.81%
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ORGANISM: Homo sapiens
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Best Local Similarity:
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APPLICANT: Young, Paul TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using TITLE OF INVENTION: Sets FILE REFERENCE: 689290-76
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                                                                                             1692 CCAAAGGGTAACAAAGGCTCTACTGGACCCGCTGGCCAGAAAGGTGACAGTGGTCTTCCA 4751
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1632 CCTGGTCCTGCTGGTCCCTTAGGTCCACCTGGTCCTCCAGGCTTACCAGGTCCTCAAGGC 4691
                                                                                                                                           sAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGluAspCysAlaGlyLe 426
                                                                                                                                                                                                                                             ProThrPro-AlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLy 332
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|1794 CCTTTACCAATCT------TGTCCTCCAAAAAAGGA------
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CURRENT FILING DATE: 2001-09-18
PRIOR PELLING DATE: 2001-09-18
PRIOR FILING DATE: 2000-09-18
PRIOR FILING DATE: 2000-09-20
PRIOR PELLING DATE: 2000-09-20
PRIOR APPLICATION NUMBER: US/60/234,923
PRIOR FILING DATE: 2000-09-25
PRIOR PELLING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-25
PRIOR FILING DATE: 2000-09-26
PRIOR FILING DATE: 2000-09-26
PRIOR PELLING DATE: 2000-09-27
PRIOR PELLING DATE: 2000-09-27
PRIOR PELLING DATE: 2000-09-27
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Patent No. US20020115057A1
GENERAL INFORMATION:
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	6158 130 38 76 180 18	-762 (1-6158)	GlyproproglyproargGlyproargGlyaspargGlyserGlnGlyproproglypro 		CCTGCAGGTCAAGATGGT	GlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAla    :::      :::     :::  GTrGcrGGACAACGGTGAAGAATCCTGGRCAACCGGGTCCTCCTGGCCCATCP	פורנורורופפררישורו	ProGlyGluArgGlyGly          CTGGAGCTGCAGGTGCA	SerProGlyLysPro	GCAGAAGGTCCTCCTGGA		GGTCCAGAAGGTCTTCGG		GGCATCCCTGGTCGGGAGACAACAACGTCTCCCTGGAGCTGCAGGCCAAGATGGACCA		CTGGTCCTATGGGACCTCCTGGCTTACCTGGTCTCAAAGGTGACCCTGGCTCCAAGGGT		GAAAAGGGACATCCTGGTTTAATTGGCCTGATTGGTCCTCCAGGAGAACAAGGGGAAAAA	Glyval	AAAGGGGATGGGGGAATT	ProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLys	TACCAGGTCCTCAAGGC		CCAAAGGGTAACAAAGGCTCTACTGGACCCGCTGGCCAGAAAGGTGACAGTGGTCTTCCA
235,863	Length: Matches: Conservative: Mismatches: Indels: Gaps:	") x US-09-954-456	rgGlyAspArgGlySer         :CAGGTGATGATGCCCT		GTTGGTTTTCCTGGAGATCCTGGTCCTCGTGGGGAACTTGGCCCTGCAGGTCAAGAT	lyGluLysGlyGluPro		GJYG1uArgG1yFrolleG1yProAlaG1yProProG1yG1uArgG1yG1 	LysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro	CTAAGGGGGAAGCAGGT	lyProSerGlyAspPro	GACCTGCAGGAAAGCCT	luGlyLeu	AAGGTCTCCCTGGAGCT	he	TACCTGGTCTCAAAGGT		GCCTGATTGGTCCTCCA	alGlyGluPro	GGTGACCGAGGCTCCCTGGAACTCAAGGATCTCCAGGAGCAAAAGGGGATGGGGGAAT	euProGlyValProGly	CACCTGGTCCTCCAGGC		GACCCGCTGGCCAGAAA
RAPPLICATION NUMBER: US/60/2 FILING DATE: 2000-09-27 RAPPLICATION NUMBER: US/60/2 FILING DATE: 2000-09-27 R OF SEQ ID NOS: 22/6 RARE: PATENTIN VERSION 3.0 NO 762 TH: 6158 INTENDAMINATION: n=a,t,g or c 4-456-762	9.61e-17 453.00 : 39.81% :1ty: 30.81% 17.98%	COPY_91_547 (1-457	oGlyProArgGlyProA        AGGTGCCAAGGGGCCGG		TCCTGGAGATCCTGGTC	yAsnLysGlyGlnLysG   : : :             : : TGACAAGGGTGAAGATG		GlyGluargGlyProlleGlyPro-          GTGAGGCTGGCCAGGTCCTC	rLysGlySerGlnGlyF	ACAAGGTGAAAAAGGTG	GlyProGlnG	CCCAGTCGGTCCTCAGG	ProGlyProProGlyLysGluGlyLeu	TGGTCCTGTGGGAGAAC	ProGlyProGlnGlyProProGlyPhe	TATGGGACCTCCTGGCT		ACATCCTGGTTTAATTG	GlnGlyLeuGlnGlyThrValGlyGluPro	AGGCTCCCTGGAACTC	OArgGlyLeuProGlyL	recreercccrragerc	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TAACAAAGGCTCTACTG
IOR APPLICATION NI IOR FILING DATE: 3 IOR PEPLICATION NI IOR FILING DATE: 3 MBER OF SEQ ID NOS FTWARE: PACENTIN VI D NO 762 ENGTH: 6158 YPE: DNA RGANISM: HOMO SAP; RGANISM: Misc_feat THER INFORMATION: 954-456-762	Alignment Scores: Pred. No.: Score: Percent Similarity: Best Local Similarity: Query Match: DB:	-712A-2_		Thr									II		а —	. ပ	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-				-		_
PRIOR APPLI PRIOR APPLI PRIOR APPLI PRIOR APLIA NUMBER OF S SOFTWARE: P SEQ ID NO 76 LENGTH: 61 TYPE: DNA ORGANISM: FRATURE: NAME/KE: NAME/KE:	Alignment Pred. No.: Score: Percent Si Best Local Query Matc	-09-763	158	178	4092	179	, ,	4212	214	4272	233	4332	244	4392	253	4452	261	4512	262	4572	274	4632	292	4692
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US-UN-994-924-085-784
US-UN-994-924-085-784
Sequence 782, Application US/09954456
Patent No. US202011507A1
Sequence 782, Application US/09954456
Patent No. US202011507A1
SERBERAL INFORMATION:
TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using C
TITLE OF INVENTION: PROCESS for Identifying Anti-Cancer Therapeutic Agents US/09/954,456
CURRENT FILINON: SEAS
FILE REFERENCE: 689290-76
CURRENT APPLICATION NUMBER: US/06/233,617
PRIOR PELING DATE: 2000-09-18
PRIOR PELING DATE: 2000-09-26
PRIOR PELING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,637
PRIOR PELING DATE: 2000-09-26
PRIOR PELING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,720
PRIOR PELING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
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                                                                                                              313 ProThrPro-AlaProGluAspAsnGlyCysProProHisTrpLysAsnPheThrAspLy 332
                                                                                                                                                                                                                           332 sCysTyrTyrPheSerValGluLysGluIlePheGluAspAlaLysLeuPheCysGluAs 352
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5087 ATCTGGT------GGTGACTTGC-----
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SOFTWARE: PatentIn version 3.0
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Conservative:
Mismatches:
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Patent No. US20020142981A1
GENERAL INFORMATION:
APPLICANT: Horne, Darci T.
APPLICANT: Vockley, Joseph G.
APPLICANT: Gene Logic, Inc.
TILE OF INVENTION: Gene Expression Profiles in FILE REFERENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
                                                                                                                   Indels:
                                                                        Length:
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                                                                      1.11e-16
452.50
52.11%
46.48%
17.96%
                    TYPE: DNA
COCANISM: Homo sapiens
US-09-954-456-782
                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
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US-09-880-107-3946
SEQ ID NO 782
LENGTH: 6728
                                                               Alignment Scores:
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US-09-880-107-3946
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Matches:
PRIOR APPLICATION NUMBER: US 60/211,379
PRIOR FILING DATE: 2000-06-14
PRIOR APPLICATION NUMBER: US 60/237,054
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 3946
LENGTH: 6728
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is Sequence 786, Application US/09954456
Patent No. US20020115057A1
GENERAL INFORMATION:
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2939 GACCAAGGTCCAGTTGGCCGAACTGGAGAAGTAGGTGCAGTTGGTCCCCCTGGCTTCGCT
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Fatent No. US20020142981A1

GENERAL INFORMATION:
APPLICANT: HORNE, Darci T.
APPLICANT: Ockley, Joseph G.
APPLICANT: Scherf, Uwe.
TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer;
FILE REPRENCE: 44921-5028-WO
CURRENT APPLICATION NUMBER: US/09/880,107

CURRENT FILING DATE: 2001-06-14

PRIOR FILING DATE: 2000-06-14

PRIOR FILING DATE: 2000-06-14

PRIOR FILING DATE: 2000-06-14

PRIOR FILING DATE: 2000-10-05
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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2094
LENGTH: 5416
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Best Local Similarity:
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TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using Cancer TITLE OF INVENTION: Sets

TITLE OF INVENTION: Sets

FILE REFERENCE: 68920-76

CURRENT APPLICATION NUMBER: US/60/23,617

FRIOR PEDLICATION NUMBER: US/60/23,617

FRIOR PAPPLICATION NUMBER: US/60/23,93

FRIOR PELING DATE: 2000-09-18

FRIOR PELING DATE: 2000-09-26

FRIOR PELING DATE: 2000-09-25

FRIOR APPLICATION NUMBER: US/60/23,93

FRIOR PELING DATE: 2000-09-25

FRIOR PELING DATE: 2000-09-26

FRIOR PELING DATE: 2000-09-26

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2400 AGAGGGTGCTGCTGGCATACCTGGAGGCAAGGGAGAAAAGGGTGAACCTGGTCTCTCAGAG
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SOFTWARE: PatentIn version 3.0
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Best Local Similarity:
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1367 AATGGATTTGCTGGTCCTGCTGGTGCTGCTCGTGGTGCTAAAGGAAAAAGAGGA 1426
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                                                                                        NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.19
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95
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Indels:
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Matches:
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LOCATION: 1492-1495, 1663, 1669, 4012, 4055
OTHER INFORMATION: a, t, c, g, or other
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440.50
49.328
43.388
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 NOS: 850
                                                               ORGANISM: Homo sapiens
           SOFTWARE: PERL Program
SEQ ID NO 104
LENGTH: 4149
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 NUMBER OF SEQ ID
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                                                    TYPE: DNA
                                                                              FEATURE:
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Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: 019a Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
CURRENT APPLICANTON US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILING DATE: 2002-01-09
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2280 GTCCTATTGGAAGCCGAGGTCCTTCTGGACCCCCAGGGCCTGATGGAACAAGAAGAGGTGAAC 2339
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2460 GTGAAATTGGTAACCCTGGCAGAGATGGTGCTCGTGGTGCTCATGGTGCTGTA-GGTGCC 2518
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                                                               2340 CTGGTGTGGTTGGTGCTGTGGGCACTGCTGGTCCATCTGGTCCTAGTGGACTCCCAGGAG 2399
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                                                                                          -----LysHisGlyGlnLeuIleLysAsn 152
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                                     ThrGluValAlaAsnLeuSerValIleMetGluGluMetLysLeuValAspSer--
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257 ------GlyProProGlyPheGln 262
2609 GACCAAGGTCCAGTTGGCCGAACTGGAGAAGTAGGTGCAGTTGGTCCCCTGGCTTCGCT 2668
                                                            2489 GGTATGACTGGTTTCCCTGGTGCTGGTGGACGGACTGGTCCCCCCAGGACCCTCTGGTATT 2548
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 206, Application US/09925299;
Sequence 206, Application US/09925299;
Publication No. US20030040617A9
GENERAL INFORMATION:
JAPFLICANT: ROSEN et al.
TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
FILE REFERENCE: PA102
CURRENT FILING DATE: 2001-08-10;
PRIOR FILING DATE: 2001-08-10;
PRIOR FILING DATE: 2001-08-08
PRIOR FILING DATE: 1999-03-12;
NUMBER OF SEQ ID NOS: 1556;
SOFTWARE: Patentin Ver. 2.0;
LENGTH: 5145
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OTHER INFORMATION: n equals a,t,g, or
NAME/KEY: misc_feature
LOCATION: (17)
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LOCATION: (5143)
OTHER INFORMATION: n equals a,t,g, or
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LOCATION: (5126)
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Best Local Similarity:
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US-09-925-299-206
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           177 ProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyProProGlyProAla 196
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APPLICANT: Horne, Darci T.

APPLICANT: Vockley, Joseph G.
APPLICANT: Scherf, Uwe
APPLICANT: Scherf, Uwe
APPLICANT: Scherf, Uwe
TILE OF INVENTION: Gene Expression Profiles in Liver Cancer
FILE REFERENCE: 44921-5028-W0
CURRENT APPLICATION NUMBER: US/09/880,107
CURRENT FILING DATE: 2001-06-14
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-06-14
PRIOR FILING DATE: 2000-10-02
NUMBER OF SEQ ID NOS: 3950
SOFFWARE: APPLICATION NUMBER: US SOFFWER SECOND S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Genbank Accession No. US20020142981A1 274616
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Mismatches:
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Gaps:
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! LOCATION: (1)..(5086)

!> OTHER INFORMATION: n = a or c or g or t

US-09-880-107-3947
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440.50
43.08%
35.85%
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Query Match:
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LENGTH: 5086
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Patent No. US20020055627A1
GENERAL INFORMATION:
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OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc_feature
LOCATION: (17)
OTHER INFORMATION: n equals a,t,g,
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LOCATION: (5126)
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NAME/KEY: misc_feature
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Sequence 22, Application US/10044090
Patent No. US20020137081A1
GENERAL INFORMATION:
APPLICANT: 01ga Bandman
TITLE OF INVENTION: GENES DIFFERENTIALLY EXPRESSED IN VASCULAR TISSUE ACTIVATION
FILE REPERENCE: PA 0028 US
CURRENT APPLICATION NUMBER: US/10/044,090
CURRENT FILINO DATE: 2002-01-09
NUMBER OF SEQ ID NOS: 850
SOFTWARE: PERL PROGram
SEQ ID NO 22
LENGTH: 5432
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Mismatches:
                                                                   Length:
Matches:
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                 or
              n equals a,t,g,
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49.328
43.388
17.488
; LOCATION: (5143)
; OTHER INFORMATION:
US-09-925-299-206
                                                                                                         Best Local Similarity:
Query Match:
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3002 GGTGAGAAGGGTCCCTCTGGAGAGGCTGGTACTGCTGGACCTCCTGGCACTCCAGGTCCT 3061
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           ; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020137081A1 1383093.13
US-10-044-090-22
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Mismatches:
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ORGANISM: Homo sapiens
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bb 3122 CTACCAGGTGTTGCTGGTGAACCTGGTCTTTGGCATTGCCGGCCCTCT 3181

Qy 314 -------ThrProAlaProGluAspAsnGlyCysPro 323

Db 3182 GGGCCCGTGGTCCTCGTGGTTGGTAGTCCTGGAGTCAACGTGCTCT 3235

Search completed: March 21, 2003, 12:32:08

Job time: 248.049 secs
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BE248064 BE248064
BQ934501 AGENCOURT
BQ71366 U1-M-F10-
BM76508 U1-E-EJ0-
BM713891 U1-E-EJ0-
BM713891 U1-E-EJ0-
BM97108 AGENCOURT
AM379436 CM4-HT024
AM379436 CM4-HT024
AA012704 RPU1402CG
AA504251 EST17006
BQ127513 1160h06.y
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BE928813 RC3-GN004
BQ955616 AGENCOURT
BG681943 602629884
BI249235 602995511
BC013626 Mus muscu
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BI697412 603348154
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W27610 35b6 Human
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BI456109 603172765
BQ891432 AGENCOURT
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Strausberg, R. Direct Submission
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                       Description
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BM905999
BQ22234
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BM125818
BM425818
BG679800
BM609933
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BQ127513
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BQ887163
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-MODEL=frame+_p2n.model -DEV=xlp
-MODEL=frame+_p2n.model -DEV=xlp
-O-gen_2_1/USPTO_spool/US09763712/runat_14032003_100950_18109/app_query.fasta_1.1877
-DB=EST -QFWT=fastap -SUFFIX=rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40 cdi -LIST=45
-UNITS=bits -START=1 -END=-1 -MATRIX=DLOSUM62 -TRANS=human40 cdi -LIST=45
-OOCALIGN=200 -THE_COORE=pct -THR_MAX=100 -THR_MIN-0 -ALIGN=15 -MODE-LOCAL
-OUSERW=pto -NORM=ext -HEAPSIZE=500 -MINIEN=0 -MAXLEN=200000000
-USER=US09763712_eCGN_1_1_4575_erunat_14032003_100950_18109 -NCPU=6 -ICPU=3
-NO_XLPXY -NO_MAP -LAGREQUERY -NGS_SCORES=0 -WART -LONGLOG -DEV_TIMBOUT=120
-WARN_TIMBOUT=30 -THRRADS=1 -XGAPDP=10 -XGAPEXT=0.5 -FGAPDP=6 -FGAPEXT=7
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4899.781 Million cell updates/sec
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                                                                     March 21, 2003, 08:08:41; Search time 1510.54 Seconds
         GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                   nucleic search, using frame_plus_p2n model
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Maximum Match 100%
Listing first 45 summaries
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Tetraodon

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This clone has the following problem: incomplete processing.
Submitted (05-JUN-2001) National Institutes of Health, Mammalian
                                                                                                                                                                          Hulyk, S.W., Hale, S.M.,
Martin, R.G., Muzny, D.M.
        Jene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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                                                       Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
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Center code: BCM-HGSC
Web site: http://www.hgsc.bcm.tmc.edu/cdna/
Contact: amg@bcm.tmc.edu
Gunaratne, P.H., Garcia, A.M., Lu, X., Huly
Yoon, V.S., Kowis, C.R., Lawrence, S., Mart
Richards, S., Gibbs, R.A.
                                             URL: http://mgc.nc1.nih.gov
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Matches:
Conservative:
Mismatches:
Indels:
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                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Vector: pCMV-SPORT6"
757 c 760 g 757 t
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/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
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/map="C57BL/6J"
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GGCCCCAGAGGTCCAAAAGGTGACAGAGGATCTCAGGGACCACCTGGTCCAACTGGCAAC
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/lab_host="DH10B (phage-resistant)"
/note="Organ: olfactory epithelium; Vector:
Olfo dT" Average insert size
/note: Onstructed by ResGen, Invitrogen Corp. Note: this is a NIH_MGC Library."
/note: This is a NIH_MGC Library."
                                                                                                                                                                  Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: capabs-remail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CDNA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLML)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM13740 row: 1 column: 13
High quality sequence stop: 665.
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NIH-WGC http://mgc.noi.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mismatches:
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Contact: Robert Strausberg, Ph.D.
Email: Gapbs-rémail.nih.gov
Tissue Procurement: Susan L. Sullivan, PhD.
CDNA Library Preparation: ResGen, Invitrogen Corp
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov.n column: 01
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2.2 kb. Constructed by ResGen, Invitrogen Corp. Note: this
is a NIH_MCC Library."
1 253 c 239 g 147 t 1 others
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Eukaryota; Metazoa; Chordata; Sciurognathi; Muridae; Mus.
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
E 1 (bases 1 to 906)

I (Dapulished (1999)

L Unpublished (1999)

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Email: cgapbs-rémail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys charlibrary Preparation: Life Technologies, Inc.
CONA Library Preparation: Life Technologies, Inc.
CONA Library Preparation: Life Technologies, Inc.
CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genemics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
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High quality sequence stop: 730.
Location/Qualifiers
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/lab_host="Organ: mammary; Vector: pCWV-SPORT6; Site_1: Sal1: Site_2: NOTI; Cloned unidirectionally. Primer: Oligo dT: Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys,
                                BI456109 906 bp. mRNA linear EST 21-AUG-2001 603172765F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:5251888 5',
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/organism="Mus musculus"
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/clone="InAGE:633276"
/clone="InHaGE:633276"
/lab_host="DH10B (phage-resistant)"
/note="Organ: otocysts; Vector: pCMV-SPORT6.1.ccdb;
Site_1: EcoRV; Site_2: Not!; Cloned unidirectionally.
Primer: Oligo dT. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is a
NH_MGC Library.
3 a 250 c 244 g 163 t 6 others
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Mus musculus cDNA clone IMAGE:6332754
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)

Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov

Iissue Procurement: Mark Maconochie, Ph.D. and Nancy L. Freeman,
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Plate: LLAMI3790 row: n column: 19
High quality sequence start: 25
High quality sequence stop: 632.
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ISM Mus musculus

Bukaryota; Matazoa; Chordata; Craniata; Vertebrata; Euteleostom!;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

CE 1 (bases 1 to 580)

RS NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

(AL Unpublished (1999)

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Contact: Robert Strausberg, Ph.D.

Famil: cgapbs-remail.nih.gov

Contact: Robert Strausberg, Ph.D.

Tissue Procurement: Gilbert Smith, Ph.D.

Contact: Robert Strausberg, Ph.D.

Famil: cgapbs-remail.nih.gov

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

Clone distribution: MGC clone distribution information can be http://image.llnl.gov

Plate: LLAM9128 row: m column: 13

High quality sequence stop: 580.

Alexania-"FVBN"

/db_xref-"taxon:10090"

/db_xref-"taxon:10090"

/db_xref-"taxon:10090"
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234 ProGlnGlyProSerGlyAspProGlyProProGlyProProGlyLysGluGlyLeuPro 253
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BE910803.1 GI:10407765
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/u.gonism="Homo sapiens"
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/tlssue_type="epidermoid carcinoma, cell line"
/tlseue_type="epidermoid carcinoma, cell line"
/tlssue_type="epidermoid carcinoma, cell line"
/t
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AGENCOURT_8035172 NIH_MGC_102 Homo sapiens cDNA clone IMAGE:6212672
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 668)
NIH-MGC http://mgc.nci.nih.gov/.
NiH-MGC http://mgc.nci.nih.gov/.
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                         426 TCTTCCCATCTCGTTTTCATAAACTCAAGAGAAGAACAGCAATGGATAAAAAAAGCATACC 485
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CDNA Library Preparation: Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can if
Cound through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLCM3377 row: c column: 09
High quality sequence stop: 656.
1. 668
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274 ProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLysGly
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Tissue Procurement: ATCC
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BQ674807.1 GI:21785641
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High quality sequence stop: 551
Location/Qualifiers
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90.15%
37.98%
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Mus musculus cDNA clone IMAGE:3484163 5',
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
1 (bases 1 to 601)
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NH+MGC http://mgc.nci.nih.gov/.
NH+MGC http://mgc.nci.nih.gov/.
National institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-rémail.nih.gov
Tissue Procurement. Lothar Hennighausen Ph.D., Robin Humphreys CDNA Library Preparation: Life Technologies, Inc.
CONA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
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Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.lln.gov column: 12
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                                                                                                                                AlaValValProLeuAlaLeuGlnAsnGluProThrProAlaProGluAspAsnGlyCys
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/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sall; Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Robin Humphreys, NIH"
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183
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11
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Mismatches:
Indels:
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01-JUN-2000

. Gay, C., Holt and

colon tumor

326

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ммээвиээ 552 bp mRNA linear EST 01-JUN-200
EST370123 MAGE resequences, MAGE Homo sapiens CDNA, mRNA sequence.
AW958053
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Hegde, P., Oi, R., Abernathy, K., Dharap, S., Gaspard, R., Gay, C., Holt, I.E., Saeed, A.I., Sharov, V., Lee, N.H., Yeatman, T.J. and Quackenbush, J.
                                                             LysLeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGln 366
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              SerGluargGluasnGluTrpLysTrpLeuaspGlyThrSerProaspTyrLysAsnTrp
                                      597 TCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGACTACAAAATTGG
                                                                                                                                                                                                                                                                                                                                                                                                    Assessment of gene expression patterns in a model of metastasis using a 19,200 element cDNA microarray Unpublished (2000)
Contact: John Quackenbush
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 3528
Fax: 301 838 0208
Email: john@@tigr.org
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149
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Mismatches:
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112 c 143 g 121 t
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Query Match:
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AW958053
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VERSION
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Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Fall-length cDNA libraries and normalization
Contact: Genoscope
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BP 191 91006 EVRX cedex - France
Email: segrefégenoscope.cns.fr, Web : www.
Location/Qualifiers
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90.62%
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases; 1 to 638)
Arakawa, T., Carninoi, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A.

Hiramoto, K., Hori, F., Ishii, Y., Ito, M., Kawai, J., Konno, H., Kouda
, M., Koya, S., Matsuyama, T., Miyazaki, A., Nomura, K., Ohno, M.,
Okazaki, Y., Okido, T., Saito, R., Sakai, K., Takahashi, F., Takeda, Y., Suzuki, H.,
Muramatsu, M. and Hayashizaki, Y., et al. 2001)

N. Shibata, K. Sakai, Y., et al. 2001)

On Jul 6, 2000 this sequence version replaced gi:8940810.

Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research (Group, RIKEN Genomic Sciences Center(GSC), Yokohama Institute
Sciences Center(GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Suehiro-ch, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan
Tel: 81-45-503-9216
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Computer-based methods for the mouse full-length cDNA
Computer-based methods for the mouse full-length cDNA
construction of a
nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)
Kondo,S., Shinagawa,A., Salto,T., Kiyosawa,H., Yamanaka,I., Aizawa
,K., Fukuda,S., Hara,A., Itoh,M., Kawai,J., Shibata,K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BB248064 RIKEN full-length enriched, 7 days neonate cerebellum Musmusculus cDNA clone A730023E20 3', mRNA sequence.
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URL:http://genome.go.go.jp,
URL:http://genome.go.jp,
Carninci.p., Shibata,Y. Hayatsu,N., Sugahara,Y., Shibata,K., Itoh
Carninci.p., Shibata,Y., Hayatsu,N., and Hayashizaki,Y.
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. . 10 (10), 1617-1630 (2000)
wagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E.,
Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura
,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and
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GlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSer
                                                                                                        GluArgGluAsnGluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLys
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prepared and sequenced in Mouse Genome Encyclopedia
Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in
RIKEN. Division of Experimental Animal Research in Riken
contributed to prepare mouse tissues. 1st strand cDNA was
primed with a primer [5'
                                                                            cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Labbratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
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Computational Analysis of Full-Length Mouse cDNAs Compared with
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//organism="Mus musculus"
//organism="1000"
//clone="A730032820"
//clone_lib="RIKEN full-length enriched, 7 days neonate
                               Please visit our web site (http://genome.gsc.riken.go.jp/) for further details.
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                     Human Genome Sequences Mamm. Genome. 12, 673-677
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Mismatches:
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/dev_stage="7 days neonate"
/lab_host="DH10B"
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AGENCOURT_8765685 NIH_MGC_130 Mus musculus cDNA clone IMAGE:6330794
5', mRNA sequence.
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Mus musculus
Eukaryote, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 884)
NIH-MGC http://mgc.ncl.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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/clone="IMAGE:6330794"
/clone=lib="NIH_MGC_130"
/lab_host="DH10B (phage=resistant)"
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Site_1: EcoRV; Site_2: Not1; Cloned unidirectionally.
Primer: Oligo dr. Average insert size 1.95 kb.
Constructed by ResGen, Invitrogen Corp. Note: this is
NIH_MGC_Library."
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://mage.llnl.gov
Plate: LLAM13785 row: m column: 03
High quality sequence stop: 352.
40
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                                                                                                                                                                                                                                                                                                                                                                                                                         Ph.D. and Nancy
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Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Mark Maconochie,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
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798.50
90.24%
82.93%
31.69%
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                                                                                                                                 111 | | | | 483 TCCATATTA 491
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AUTHORS
TITLE
JOURNAL
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. E. (bases 1 to 808)

NIH-MGC http://mgc.nci.nlh.gov/.

Lo Inpublished (1999)

Contact: Robert Strausberg, Ph.D. Email: cgapbs-rémail.nih.gov
Tissue Procurement: Dr. Jim Lin, University of Iowa cDNA Library preparation: Dr. M. Bento Soares, University of Iowa cDNA Library Arrayed by: Dr. M. Bento Soares, University of Iowa Clone Distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Libra at:

http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BQ771366 808 bp mRNA linear EST 26-JUL-2002
UI-M-FIO-byu-g-09-0-UI.rl NIH_BMAP_FIO Mus musculus cDNA clone
IMAGE:5702432 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This clone was contributed by the Brain Molecular Anatomy Project
                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                              755
                   456
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           179 GlyAsnLysGlyGlnLys-----GlyGluLysGlyGluPro---GlyProPro---Gly 194
                                                                                                                                            120 uMetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIleMetGluGluMetLy
                                                                                                                                                                                                                                                                                                                                                                                                      140 sLeuValAspSerLysHisGlyGlnLeuIleLysAsnPheThrIleLeuGlnGlyProPr
                                                             60 nIleIleSerAsnIleSerTyrThrAlaHisHisLeuArgThrLeuThrSerAsnLeuAs
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/tissue_type="whole brain"
/dev_stage="embryo 12.5dpc"
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/organism="Mus musculus"
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/db_xref="taxon:10090"
/clone="IMAGE:5702432"
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EST.
house mouse.
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of Iowa

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Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
                                                                                                    Contact: Soares, MB Program for Rat Gene Discovery and Mapping
                                                                  Genome Res. 6 (9), 791-806 (1996)
(bases 1 to 500)
                                                                                                                                    University of
                                                    discovery
                                                                                    97044477
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REFERENCE
                                                                  JOURNAL
                                                                                  MEDLINE
                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                TITLE
                                                                                                    COMMENT
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     /ncce="Organ: Brain; Vector: pXx-Asc; Site_1: ECOR I; Site_2: Not I; The library was constructed according Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. Denatured RNA was size fractionated on a 1% agarose gel.First strand cDNA synthesis was primed with oligo-dr primer containing a Not I site. Double strand cDNA was size elected according to mRNA size fraction, ligated with EcoR I adaptor, digested with NotI and then cloned directionally into pXx-Asc vector. The library tag sequence located between the Not I site and the polyA tail is CAGCCACGAC. This library was created for the University Iowa Brain Anatomy Project (BMAP): 'Gene Discovery in the Developing Mouse Nervous System', supported by National Institute of Mental Health (NIMH), Hemin Chin, Ph.D., program coordinator."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UI-E-EJO-ahq-c-05-0-UI.S2 UI-E-EJO Homo sapiens CDNA clone UI-E-EJO-ahq-c-05-0-UI.S2 UI-E-EJO Homo sapiens CDNA clone BM676508 UI-E-EJO-ahq-c-05-0-UI 3', mRNA sequence. EST 27-FEB-2002 EM676508.1 GI:18986404
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGlnGln 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388 ArgGluAsnGluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTrpLysAla 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    308 AlaLeuGlnAsnGluProThrProAlaProGluAspAsnGlyCysProProHisTrpLys 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 GCTCTGCAGAATGAACCCAACATCAGAGGTCAACGGATGTCCGCCTCACTGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           368 TrpIleLysLysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGlu
/lab_host="DH10B (T1 phage resistant)"
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131
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Mismatches:
Indels:
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767.00
93.338
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Best Local Similarity:
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BM676508/c
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Chorozoe "fetal and adult"

//ab_host="Part and adult"
//ab_host="DH10B (Life Technologies) (TI phage resistant)"
//note="Organ: eye; Vector: pr713-pac (Pharmacla) with a modified polylinker; Site_1: ECCR I; Site_2: Not I;
UI-E-EJO is a subtracted cDNA library constructed according to Bonaldo, Lennon and Soarse, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed erranded cDNA was ligated to an ECOR I adaptor, digested with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an ECOR I adaptor, digested with Not I, and cloned directionally into pT73-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGANTCAAGA; lens, CGATAGGGA; eye anterior segment, ARGCGCGAT; optic nerve, CCATAAGTG; retina, CGCGC; Retina Foveal and Macular, GTCC; RPE and Choroid, ACCPA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI).
TAG_LIB=UT-E-EJO
TAG_SEQ=AATGCCGGAT
TAG_SEQ=AATGCCGCAT
TAG_SEQ=AATGCCGCAT
ULIVELSILY OI LOWA

451 Eckstein Medical Research Building Iowa City, IA 52242, USA

Tel. 319 335 8250

Fax: 319 335 9565

Email: msoares@lblue.weg.uiowa.edu

Tissue Procurement: Dr. Gregg Hageman

CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iow

CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa

DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa

Clone Distribution: Researchers may obtain clones from Research

Seg primer: M13 Forward

POLYA-Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="fetal eyes, lens, eye anterior segment, optic nerve, retina, Retina Foveal and Macular, RPE and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         436
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Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/db_xref="texon:9606"
/clone="UT-E-E00-ahq-c-05-0-UI"
/clone_lib="UT-E-E00"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches:
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/dev.stage="fetal and adult"
/lab_host="DH10B (Life Technologies) (TI phage resistant)"
/note="Organ: eye; Vector: pT773-Pac (Pharmacia) with a modified polylinker; Site_1: EcoR I; Site_2: Not I;
UI-E-EJO is a subtracted cDNA library constructed according to Bonaldo, Lennon and Soares, Genome Research, 6:791-806, 1996. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an EcoR I adaptor, digested with Not I, and cloned directionally into pT73-Pac vector. The oligonucleotide used to prime the synthesis of first-strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tags for this library are: fetal eyes, AGAATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BM713891 507 bp mRNA linear EST 28-FEB-2002 UI-E-EJO-ahq-c-05-0-UI.rl UI-E-EJO Homo sapiens cDNA clone UI-E-EJO-ahq-c-05-0-UI 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Program for Rat Gene Discovery and Mapping
University of Iowa
University of Iowa
451 Eckstein Medical Research Building Iowa City, IA 52242, USA
7451 Eckstein Medical Research Building Iowa City, IA 52242, USA
7451 Eckstein Medical Research Building Iowa City, IA 52242, USA
7451 Fax: 319 335 9565
Email: msoarcs@blue.weeg.uiowa.edu
Tissue Procurement: Dr. Gregg Hageman
CDNA Library preparation: Dr. M. Bento Soares, Univeristy of Iowa
CDNA Library Arrayed by: Dr. M. Bento Soares, Univeristy of Iowa
DNA Sequencing by: Dr. M. Bento Soares, Univeristy of Iowa
Clone Distribution: Researchers may obtain clones from Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostoml;
Mammalla; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 507)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bonaldo,M.F., Lennon,G. and Soares,M.B.
Normalization and subtraction: two approaches to facilitate gene
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380 TrplleGlyLeuThrAspSerGluArgGluAsnGluTrpLysTrpLeuAspGlyThrSer 399
                                                                                                     400 ProAspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyPro 419
                                                                                                                                                         256
                                                                                                                                                                                                           439
                                                                                                                                                                                                   Genetics (www.resgen.com).
The following repetitive elements were found in this CDNA sequence: 443.498, >PoLY_A#Simple_repeat
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                   440 ValAsnAsnPheIleCysGluLysAspArgGluThrValLeuSerSerAlaLeu 457
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/organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genome Res. 6 (9), 791-806 (1996)
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Choroid"
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TITLE
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KEYWORDS
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; lens, CGATTAGCGA; eye anterior segment, AATGCCGCAT; optic nerve, CCATTAAGTG: retina, CCGGG: Retina Foveal an Macular, GTCC; RPE and Choroid, ACCTA. This library was created for the program, Gene Discovery in the Visual System, supported by National Eye Institute (NEI)."
                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
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                                                                                                                                                                                                                                                                         362 ThrargGluGluGlnGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrpIle
                                                                                                                                                                                                                                                                                                                                                      402 TyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        183 TACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCCATGGGCCAGGAAA
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Matches:
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Job time: 1517.54 secs
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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-MODEL=frame+_p2n.model -DEV=xlp
-MODEL=frame+_p2n.model -DEV=xlp
-Gegnz_1/USPTO_spool/US09763712/runat_14032003_100949_18101/app_query.fasta_1.1877
-DB-GenEmbl -OFWN=fastap -SUPFIX-rge -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=bluman40 cdi -LIST=45
-UNITS=bits -START=1 -END=-1 -MATRIX=DIO -THR_MIN=0 -ALIGEN=15 -MODE=LOCAL
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-WARN_TIMBOUT=30 -THRRADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPEXT=7
                                                                                  21, 2003, 06:54:47; Search time 3021.43 Seconds (without alignments) 4401.885 Million cell updates/sec
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1 MNSQLNSFTGQMENITTISQ.......EDVNNFICEKDRETVLSSAL 457
           GenCore version 5.1.4_p5_4578 Copyright (c) 1993 - 2003 Compugen Ltd.
                                                           - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                 2054640 seqs, 14551402878 residues
                                                                                                                                                                                                                                                                                           of hits satisfying chosen parameters:
                                                                                                                                    US-09-763-712A-2_COPY_91_547
                                                                                                                                                                                                                                                                                                                                                                                   Listing first 45 summaries
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Maximum DB seq length: 2000000000
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AD000999 Homos sapi AC114677 Mus muscu AC102618 Mus muscu AB007829 Homo sapi E32511 Scavenger r E32509 Scavenger r BC026446 Mus muscu AL845306 Danio rer MB1231 Rat pulmona AF055558 Alvinella AX454442 Sequence AX490920 Sequence AB078434 Mus muscu AB038519 Mus muscu D90279 Human mRNA M76729 Human pro-a M76730 Chinese ham L06863 Cricetulus AX334792 Sequence X65018 H.saplens m X75911 B.taurus mR AF509590 Bos tauru BC0022318 Homo sapi BC008760 Homo sapi E07265 CDNA encodi U07973 Gallus gall AX146422 Sequence AX146424 Sequence AF137273 Gallus ga 1705 Mus muscu Homo sapi Rattus no Mus muscu Mus muscu L40156 Mus musculu Homo sapi Homo sapi Homo sapi Homo sapi Homo sapi AX047353 Sequence AX047359 Sequence AB038518 Homo sapi AL713657 Homo sapi Homo sapi Description AC112416 FAC112416 FAC102618 MC102618 FAC102618 FAC102618 FAC016128 FAC01612 SUMMARIES CRUPA1V CRUCOLVIIA 3 AF053538 10 BC003705 10 MUSSPD D BC026446 AL845306 HSM802985 AB052103 AX334792 HSMRNAPD BTLSPD AF509590 BC022318 BC008760 E07265 AB038519 AC114677 AC102618 AC016128 AC024368 AP001022 AP000900 AP000939 AP000939 AX146422 AX146424 AX137273 AX454442 AX490920 AB078434 AC114677 AC102618 AB038518 AB007829 GGU07973 AP000915 10 RATSPD HUMCA1V

ALIGNMENTS

RESULT 1

em\_pl:\* em\_ro:\* em\_sts:\* em\_un:\*

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ILTNLQRSVDDTGAGQALGRTKNDFGNLQOYFLQAKKDTDWLKRVQSLGTLAANNSALA
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RPQLEFTDTVNIISNISYTSHRHLRTUTSNLWREVRTTCTDTLTKHTDDDTSLNNTLANI
RLDSVSLRMQQDLMRSRLDTEVANLSVIMSEMKLVDSKHGQLIKNFTILQGPFGPRGP
                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Submitted (25-JUN-1997) Katsuki Ohtani, Asahikawa Medical College,
Department of Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa,
Hokkaido 078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:+81-166-68-2393, Fax:+81-166-68-2399)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LPGVPGMPGPKGPPGPPGPSGAVVPLALQNEPTPAPEDNGCPPHWKNFTDKCYYFSVE
KEIFEDAKLFCEDKSSHLVFINTREEQQWIKKQMVGRESHWIGLTDSERENEWKWLDG
TSPDYKNWKAGQPDNWGHGHGPGEDCAGLIYAGQWNDFQCEDVNNFICEKDRETVLSS
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GSRGSPGKFGPQGPSGDPGPPGPPGKEGLPGPQGPPGFPGCJGGTVGEPGVPGPRGLPG
                     PRI 21-NOV-2001 complete cds.
                                                                                                                                           Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia: Eutheria; Primates; Catarrhini; Hominidae; Homo.
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The membrane-type collectin CL-Pl is a scavenger receptor cyascular endothelial cells
J. Blol. Chem. 276 (47), 44222-44228 (2001)
21570232
(bases 1 to 2983)
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Matches:
Conservative;
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/sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_lib="placenta"
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                                          CL-P1 mRNA
                                                                                AB005145.1 GI:17026100
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71. .2299
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Ohtani, K.
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AB005145
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AB005145
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AlaIleLysPheAsnGlnLeuGluGluArgPheGlnLeuPheGluThrAspIleValAsn
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                                                                                               MetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIleMetGluGluMetLys
                       IlelleSerAsnIleSerTyrThrAlaHisHisLeuArgThrLeuThrSerAsnLeuAsn
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ASPTYLLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGly
AsnasnPhelleCysGluLysAspargGluThrValLeuSerSerAlaLeu 
2641 bp W00068380.
data; ates;
<pre>1 (bases 1 to 2641) Bandman,O., Hillman,J.L., Tang,Y.T., Lal,P., Yue,H., Baughn,M.R. Lu,D.A. and Azimzai,Y. Extracellular matrix and adhesion-associated proteins Patent: WO 01068180.A 39 16-NOV-2000.</pre>
Incyte Genomics, Inc. (US) Location/Qualifiers 1. 2641 /organism="Homo saplens"
/db_xref="taxon:9606" /note="Incyte ID No: 4586187CB1 / 628 c 608 g 582 t
Length: Matches: Conservative Mismatches: Indels: Gaps:
US-09-763-712A-2_COPY_91_547 (1-457) x AX047353 (1-2641) Ov
AlaIleLysPheAsnGlnLeuGluGluArgPheGlnLeuPheGluThrAspIleValAsn
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MetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIleMetGluGluMetLys

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3058 bp mRNA linear PRI 08-MAR-2001 for scavenger receptor with C-type lectin
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sapiens SRCL mRNA for
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LEGYPGMPGPRGPPGSAVVPLALQNEPTPAPBDNSCPPHWKNFTDKCYYFSVB
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TSPDYKNWKAGQPDNWGHGHGPGEDCAGLIYAGQWNDPQCEDVNNFTCERCDRETYLSS
                                                                            1 (sites)
Nakamura,K., Funakoshi,H., Miyamoto,K., Tokunaga,F. and Nakamura,T.
Molecular cloning and functional characterization of a human
scavenger receptor with C-type lectin (SRCL), a novel member of a
scavenger receptor family
alochem. Blophys. Res. Commun. 280 (4), 1028-1035 (2001)
2 (bases 1 to 3058)
                                                                                                                                                                                                                 Direct Submission.

Direct Submission.

Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medical School, Division of Biochemistry, Biomedical Research Center; 2-2 yamadaoka, Suita, Osaka 565-0871, Japan

(E-mail:knakamur@onbich.med.osaka-u.ac.jp,

Tel:81-6-6879-3783|ex.3783), Fax:81-6-6879-3789)
                                                 Craniata; Vertebrata; Euteleostomi;
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/gene="SRCL"
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/product="scavenger receptor with C-type lectin type
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/db_xref="taxon:9606"
/tissue_lib="Placenta"
                            Homo sapiens
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Mammalia; Eutheria; Primates;
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Patent: Wo 0208284-A 27 31-JAN-2002;
Genentech, Inc. (US); Baker, Kevin P. (US); Ferrara, Napoleone (US); Gerber, Hanspeter (US); Gerritsen, Mary E. (US); Goddard, Audrey (US); Godowski, Paul J. (US); Gurney, Austin L. (US); Hillan, Kenneth J. (US); Marsters, Scot A. (US); Pan, James (US); Pandi, Nicholas F. (US); Stephan, Jean-Phillippe F. (US); Matanabe, Colin K. (US); Williams, P. Mickey (US); Wood, William
                                                                                                                                                                                               Baker,K.P., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A.,
Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J.,
Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
                                                                                                                                                                     Vertebrata; Euteleostomi;
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Baker,K.D., Ferrara,N., Gerber,H., Gerritsen,M.E., Goddard,A.,
Godowski,P.J., Gurney,A.L., Hillan,K.J., Marsters,S.A., Pan,J.,
Paoni,N.F., Stephan,J.P., Watanabe,C.K., Williams,P.M., Wood,W.I.
                                                                       Euteleostomi;
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Patent: WO 0200690-A 27 03-JAN-2002;
Genentech, Inc. (US)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                    GlyProLysGlySerArgGlySerProGlyLysProGlnGlyProSerGlyAsp
                                                                  CCAGGCCCCCCGGGCCCACCAGGCAAAGAGGGACTCCCCGGCCCTCAGGGCCCTCCTGGC
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Ohtani,K., Suzuki,Y., Eda,S., Kawai,T., Kase,T.,
Sakai,Y., Fukuoh,A., Sakamoto,T. and Wakamiya,N.
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SPVDYKNWKAGQPDNWGSGHGPGEDCAGLIYAGQWNDPCQCBEINNFICEKERENVPS
Direct Submission
Submitted (18-378-2002) Katsuki Ohtani, Asahikawa Medical College,
Wibinited (18-378-2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido
Microbiology; 2-1-1-1 Midorigaoka-Higashi, Asahikawa, Hokkaido
078-8510, Japan (E-mail:ohtani@asahikawa-med.ac.jp,
Tel:81-166-68-2393, Fax:81-166-68-2399)
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Matches:
Conservative:
Mismatches:
Indels:
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/protein_id="BAC05523.1"
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/tissue_lib="Liver"
1. .2637
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92. .2320
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                                            GlyProArgGlyProArgGlyAspArgGlySerGlnGlyProProGlyProThrGlyAsn
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KEYWORDS
SOURCE
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/Translation="1904"02"

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KGDRGSQGPPGFRGNGGKGEKGEFGPFRGFATGPVGFPGERGSKGSKGSQFPK
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                                                                 Nakamura, K., Funakoshi, H., Tokunaga, F. and Nakamura, T.
Molecular cloning of a mouse scavenger receptor with C-type lectin (SRCL)(1), a novel member of the scavenger receptor family Biochim. Biophys. Acta 1522 (1), 53-58 (2001)
21575692
2 (bases 1 to 3291)
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nter; 2-2
                    Vertebrata; Euteleostomi;
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Nakamura,K. and Nakamura,T.
Nakamura,K. and Nakamura,T.
Direct Submission
Submitted (18-FEB-2000) Kenji Nakamura, Osaka University Medico
School, Division of Blochemistry, Blomedical Research Center;
yamadaoka, Suita, Osaka 565-0871, Japan
(E-mail:Knakamur@onbich.med.osaka-u.ac.jp,
Icoation/Oualifiers
1. .3291
                  Craniata; Vertebrata; Euteleosto
Sciurognathi; Muridae; Murinae;
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1. .3291
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                Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
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77. .2305
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 1886)
Koehrer, K., Beyer, A., Mewes, H.W., Weil, B. and Wiemann, S.
Direct Submission
Submitted (12-MAR-2002) MIPS, Am Klopferspitz 18a, D-82152
Martinsried, GERMANY
Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKF2); Email S. wiemann@dkfz-heidelberg.de;
Berlin/Germany) within the cDNA sequencing consortium of the German
                                                                                HSM8U2985 1886 bp mRNA linear PRI 20-MAR-2002
HOMO Sapiens mRNA; cDNA DKF2p547G1215 (from clone DKF2p547G1215).
AL713657
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Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de Further
information about the clone and the sequencing project is available
at http://mips.gsf.de/proj/cDNA/.
Location/Qualifiers
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PGFQGLQGTVGEPGVPGPRGLPGVPGMPGPKGPPGPPGPPGAAVVPLALQNEPTPA
PEDNGCPPHWKNFTDKCYYFSVEKEIFEDAKLFCEDKSSHLVFINTREEQQWIKKQMV
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TCTDTLTKHTDDLTSLnntlanirLDSVSLRMQQDLMRSRLDTEVANLSVIMEEMKLV
DSKHGQLIKNFTILQGPPGFRGPRGDRGSQGPPGPTGNKGQKGEKGEPGPPGPAGERG
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/clone_lib="547 (synonym: hfbr1). Vector pSport1; host
DBH10B: sites NoII + SalI"
/dev_stage="fetal"
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This clone (DKFZp547G1215) is available at the RZPD in Berlin.
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/notew"similarity to asialoglycoprotein receptor (Mus
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/protein_id="CAD28466.1"
/db_xref="G1:19584340"
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/db_xref="taxon:9606"
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AB052103.1 GI:13365552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (sites)
Makanura, K., Funakoshi, H., Miyamoto, K., Tokunaga, F. and Nakamura, T.
Molecular cloning and functional characterization of a human
scavenger receptor with C-type lectin (SRCL), a novel member of a
scavenger receptor family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vakamura, K. and Nakamura, T. Direct Submission (Valentied (Valentied) (Valent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="scavenger receptor with C-type lectin type II"
/protein_id="BaB39148.1"
/db_xref="GI:13365553"
                                       1083 GACTACAAAAATTGGAAAGCTGGACAGCCGGATAACTGGGGTCATGGCCCATGGGCCAGGA 1142
                                                                                 420
AspTyrLysAsnTrpLysAlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGly
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                                                                   61 IleIleSerAsnIleSerTyrThrAlaHisHisLeuArgThrLeuThrSerAsnLeuAsn
MetAsnSerGlnLeuAsnSerPheThrGlyGlnMetGluAsnIleThrThrIleSerGln
                                                  21 AlaAsnGluGlnAsnLeuLysAspLeuGlnAspLeuHisLysAspAlaGluAsnArgThr
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                                                                                                                                                                                                                                                                   101 AsnAsnThrLeuAlaAsnIleArgLeuAspSerValSerLeuArgMetGlnGlnAspLeu
                                                                                                                                                                                                                                                                                                                       121 MetArgSerArgLeuAspThrGluValAlaAsnLeuSerValIleMetGluGluMetLys
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qq	1878 GCCAACCCCCAGTGTGTGGCCCCCACCCATGTTATTTTGTTTTTGTTTTTGTTTTTGAGAC 1937			
Qy	320 320	δλ	320	
qa	1938 AGGGTCTCACTCTGTTGCCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACC 1997	qu	3018 TT	TTTGTTGATCCGTGAGCCCA'
ΛO		QY	320	
3 원	CCCACATCCCGGGTTCAAGTGATTCTCTGCCTTAGCCTCCCAGGTAGCTGGGAATACAA	qa	3078 CC	CCGTATGATTCCAGACTGAC
ò		QY	320	
q	GCGTGTGCCCCCACAGCCAGCTAATTTTTGTATTTTTAGTAGAGGGGTTTCACAGTGT	qa		TGTCATTTCTGTCATTGTGA
Qy	320 320	Qy		
qq	2118 TGGGCAGGGTGGTTTCAAACTTCTGGCCTCAAGTGATCCACCTACCT	qa : .		ATCCATCCAGATTATGTGGT
δy	320 320	Qy		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
q	2178 GCTGGGAATACAGGTGTGAACCACCATTTTGTCCCCGGCTGCATATTAATTA	අු		TGCGAGCACGTCCGTGAACG
δy	320 320	Ολ		
qq	2238 AAAGGCATCATAGGGGTTGGCACAGGAGCCCTGCTGCCAGAACAGGCCTCCATACCAGGC 2297	da 		AGCGGGACCACAGTTTTGGC
Ωy	320 320	Ολ		
q	2298 AIGIGICICICICIAAACGCCAIIGGGIIIIIIAGIGCICAIIIGIIIIAIGIAIIAIGI 2357	đa —		ATCTTTTAATCAATGTTTTC
ογ	320 320	δλ		PheThrAspLysCysTyrTy 
q	2358 GTGTATGTATGGGACAGGGTCTCACTCTGTCACCCAGGCTGGAATGACGAAGTGAAGTAG 2417	đ		TTCACAGACAAATGCTACTA
Qy	320 320	δλ		PheCysGluAspLysSerSe
qq	2418 IGCAAACAIAGCICATIGCAGCITIGACCICCIGGGCTIAGGIGAICTICCCACICAGAC 2477	q <sub>Q</sub>		TTCTGTGAAGACAAGTCTTC
οy	320 320	δλ		IleLysLysGlnMetValGL
qq	2478 TCCTGCGTAGCTGGGACCACAGGGGTATGCCACACCTGGCTAATTTTTTTT	qa		ATAAAAAACAGATGGTAGG
Qy	320 320	Qy		GluAsnGluTrpLysTrpLe
qq	2538 TTTTGTAGAAACAGGGTCTTGCTATGTTGCCCAGGCTGGTCTTGAACTCCTGGCCTCAAG 2597	අ <u>ධ</u>		GAAAATGAATGGAAGTGGCT
Qγ	320 320	δλ		GlnProAspAsnTrpGlyHi:
qq	2598 CAACCTCCTGCTCAGTCTTGCAAAGTGCTGGGATTCCAGGTGGGAGCCACTGCACCTG 2657	<u>අ</u>		GCCGGATAACTGGGGGTCA
Qy	320 320	Qy		AlaGlyGlnTrpAsnAspPh 
QQ	2658 GCTCTTGCACTTGTTTATTATAGGAGCCAGCCCTCAGAAGACAAAACACAAATGCAAAACA 2717	<b>q</b> a		TGGGCAGTGGAACGATTT
δy	320 320	oy		ArgGluThrValLeuSerSe
qa	2718 TITCCITCAGGGAAGCCTGCTGGCCGCCTGAGCGCTCTTCCCTCGTTTTACATCCTCAC 2777	g 	86/	GGAGACAGTACTGTCATC
ΟŊ	320 320	RESULT AC1124	LT 10 2416	
qq	2778 TCTGGAGATAGATGGGCTCCCTCGGTTAGCTCCATCAACATGTGGATGGA	DEFI	LOCUS	AC112416 Rattus norvegicus
οy	320 320	ACCE		AC112416
QQ	2838 ATTGATGACTACATTTAATTTCTTTTTGAGAAAGGTGTTAGATGTTACGGTGCCTTCTAG 2897	KEYWORDS		AC112416.3 GI:ZI/AHTG; HTGS_PHASE1.
Qy	320 320	SOUR	ORGANISM	. >
qa	2898 TCTTTGATAATTAAACCTTTGGCAAAACTCGAATGTTTGGTTAGCAACCAAGCCTATTT 2957			Eukaryota; metazoa Mammalia; Eutheria
δλ	320 320	REFE	REFERENCE	1 (bases 1 to 130
qq	2958 TTCTCTCTTTGACCCAACGCTATTCTACTTGATTTTGGTCGGTGAGGCCCGGGTTATT 3017	<b>W</b>		Alsbrooks, S.L., Am

Qy	320	320
qq	3018	TTTGTTGATCCGTGAGCCCATTTTGGTGCTGGGTTCTCACATCCAAGTGTTCCTGGGTT 3077
QY	320	320
qq	3078	CCGTATGATTCCAGACTGACGCTGAACATCTGTGCCTGCC
QY	320	320
q	3138	TGTCATTTCTGTCATTGTGAAGACGGATCCAAACACAGAAGAACAAAGACCCAGTCCAAG 3197
Qy	320	320
<b>q</b> a :	3198	ATCCATCCAGATTATGTGGTTTCGGCTTGTGCTCTGCAGTCCACTTTGGGTCATGCTTGC 3257
Qy	320	320
qq	3258	TGCGAGCACGTCCGTGAACGTCAGCTGTGGGGCCTGGGAGGGA
Οy	320	320
qq	3318	AGCGGGACCACAGTTTTGGCCTCTGAAACACAGCTGAAGAAAGGCAGAGTGCTTTCTGTG 3377
δλ	321	
qq	3378	ATCTTTTAATCAATGTTTTCCACTTTTGCATTCCTAGGCTGCCCGCCTCACGGAGAAC 3437
oy Op	3438	PhethrasplyscystyttyrPheSerValGlullysGlullePheGluaspalalysLeu 348 
δy	349	PheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGluGluGlnGlnTrp 368
qq	3498	TTCTGTGAAGACAAGTCTTCACATCTTGTTTTCATAAACACTAGAGAGGAACAGCAATGG 3557
δλ	369	IleLysLysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAspSerGluArg 388
qq	3558	ATAAAAAACAGATGGTAGGGAGAGAGAGCCACTGGATCGGCCTCACAGACTCAGAGCGT 3617
QY dq	389	GluasoGlutrpLysTrpLeuAspGlythrSerProAspTyrLysAsnTrpLysAlaGly 408 
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Qy	429	AlaGlyGlnTrpAsnAspPheGlnCysGluAspValAsnAsnPheIleCysGluLysAsp 448
qa	3738	
Qy	449	rgGluThrValLeuSerS
qa	3798	
RESULT AC11241 LOCUS DEFINIT	RESULT 10 AC112416 LOCUS DEFINITION	AC112416 13-JUL-2002 Rattus norvegicus clone CH230-350K4, *** SEQUENCING IN PROGRESS
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ORG	RGANISM	Eukaryc Mammali
REFE AU	REFERENCE AUTHORS	<pre>rdrtus. l (bases 1 to 130763) Muzny,D.M., Adams,C., Adio-Oduola,B., Ali-osman,F.R., Allen,C., Alsbrooks,S.L., Amaratunge,H.C., Are,J.R., Ayele,M., Banks,T.,</pre>

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                         Bouck, J., Bowle, S., Blanken, S. Brown, B., Bryant, N. P., Bryant, J., Benter, J., Benter, J., Brown, E., Burck, J., Chavet, J., Dathorne, S.R., David, R., Davy-Carroll, L., Dederich, D.A., Earnhatt, C., Edgar, D., Edwards, C.C., Elbaj, C., Escotto, M., Falls, T., Ferraguto, D., Flags, N., Fort, J., Poster, P., Frantz, P., Gabisi, A., Gao, J., Garcia, A., Garrer T., Garza, N., Gill, R., Harris, C., Harris, K., Harri, Haviday, C., Harris, B., Harris, C., Harris, K., Harri, Haviday, C., Harris, E., Harris, K., Harri, Havidah, S., Hamliton, K., Harris, C., Harris, K., Harri, Havidah, S., Hamliton, R., Harrison, E., Kally, S., Khan, U., King, L., Korah, J., Kovar, C., Lidhero, J., Jackson, L.E., Jacobson, B., Jia, Y., Lucier, A., Lucier, K., Luna, R., Ma, J., Liu, J., Li, Z., Lichtarge, O., Lieu, C., Liu, J., Liu, W., Loulseged, H., Massey, E., Manniney, E., Marting, R., Marting, R., Marting, E., Marting, R., Mar
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NOTE: This is a 'working draft' sequence. It currently consists of 28 contigs. The true order of the pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (13-UUL-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA On Jul 12, 2002 this sequence version replaced gi:20303233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Department
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3 (bases 1 to 130763)
Bimage, K., Blankenburg, K., Bonnin, D.,
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Chemistry: Dye-terminator Big Dye: 100% of reads
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Consensus quality: 113686 bases at least Q40
Consensus quality: 115729 bases at least Q30
Consensus quality: 117044 bases at least Q30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
------ Project Information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center: Baylor College of Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Center clone name: CH230-350K4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Center project name: GRRG
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AUTHORS

COMMENT

TITLE

is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as truns of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved. 2721 others contig of 14515 bp in length gap of unknown length contig of 12788 bp in length of 10054 bp in length 12523 bp in length 130763 215 16 in length bp in length length length ength length ength ength ength ength ength ength ength ength unknown length gap of unknown length unknown length Ţ 1n of 7994 bp in Length: Matches: Conservative: contig of 11353 bp /organism="Rattus norvegicus" /db\_xref="taxon:10116" /clone="CH230-350K4" 25956 c 25888 g 38088 t unknown of 2104 I unknown of 3495 unknown of 5800 h unknown of 1587 unknown of 2191 unknown of 1505 unknown of 3197 unknown of 3263 unknown 2427 2601 unknown of 5343 of 1103 of 1250 unknown unknown unknown 2191 unknown unknown 2582 unknown unknown 4038 unknown unknown of 3391 unknown of 3876 unknown of 1177 oţ oę oŧ oţ ŏ οĘ ō of οį ō Location/Qualifiers gap of contig gap of contig contig gap of contig contig gap of contig gap of contig contig gap of contig gap of contig gap of gap of contig gap of contig gap of contig contig gap of contig gap of contig gap of contig gap of gap of contig 1103: contig contig contig contig contig gap of gap of contig gap of contig gap of gap of qap of gap of gap of

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1339   Production   1349   Production   1349	3 .	GGACCGCCTGGTCCAACTGGCAACAAGGGACAGAAGGAAG		1 1 1 1 1
213 GlybysGlySerGlyGlyBerGlyGlySerFocklyBerFocklyDysPro 322   324   324   324   324   324   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   325   32	oy Db	Pro&lyProAlaG1yG1uArgG1yPro11eG1yProAlaG1yProProG1yG1uArgG1y	14987	GGCTGTCA
13967   AGCAMAGGTTCCAAAAGGTTCCCAAAAGGTTCCCACAAAAGCTT   14026   23   23   23   24   24   25   25   25   25   25   25	δy	GlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro	321	
1927   GGCCCTCAAGGGCCTGGGACCCCGGGTCCACGCAAGGATCCCTGGGGACTC   1406   09   15107   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   1927   192	q	ACCAAAGGATCCAAAGGCTCACAGGGTCCCAAAGGATCACGTGGGTCCCCAGGAAAGCCT	1001	T was well a
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14.07	QY	ProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGlubroGly	351 15167	AspLysSe            GACAAATC
23 Gijpproprogrammen	Ş G	ValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLys	367	GlnTrpile    ::: ACTTGGTTG
14207   1711	3 8	GIRCCI GGGGGGCTIACCAGGCII IACCAGGGGIGCCAIGCCAIGCCCICAAG	383	Thraspse
313   ProTheProAlaProGluAspAsn   320	g g	4.7. TO CLOSE OF THE CONTROL OF THE	15287	AGGGAGTCAA
14267   CCAACCCCAGGATCAGAGGTCAACGGTAAGTCCAATTCAGCCAGAAATAG   1436   09   423     320	δŽ	ProThrProAlaProGluAspAsn	403	AsnTrpL
14327   GCAGTGTGTGGCTAAACCAGAGTCCCCTAATTACACTTAATATCAG   1436   Db   15371     320	qq	CCAACCCCAGCATCAGAGGTCAACGGTAAGTCCAAATCATCCTTTTCAGCCAGAAATAAG	15347	
14327 GCAGTGTGTAGGCTAAACCAGGAGTCCCCTAATTACACTTAATATCAG 14386 RESULT 11 320	Οy		423	AlaGiyLe
320	qq	GCAGTGTGTGGCTTGGCTAAACCAGACCTCAGGAGTCCCCTAATTACACTTAATATCAG		TGTGAAT
14387 GGACCCTATGTGTTCCTCGGAGCCTCGGCCCTGGTTTCTGCTT   1446   DEFINITION	δy			
320   ACCESSION   VERSION   VERSIO	q	GGACCCTATGTGTTCCTCTGGATGCCTCGGTGCTGTCACTCAGGACCCTGTGTTCCTGCT	-	US MUSC
1447 TAAACATTATCAGGACTCTACTTTAGATGAGGCCCTCAGAAGATACCTATACC	Qγ			c114677
14507   CCAAGTACTTATTCAAGCTATCCTGCACCGGCTGCTCCTTGTCTT   14566   REFERENCE     320	QQ	TAAACATTATCAGGACTCTACTCATTTAGATGAGCCAGGCCCTCAGAAGATACCTATACC		TG; HTG
14507 CCAAGTACTTATTCAAGCTATCCTGCACCGGCTGCTCCTTGTCTT 14566  REFERENCE 320	ōλ		MSIN	com esno
320	qq	CCAAGTACTTATTTCAAGCTATCCTGCACCGGCTGCTCCCTGACCATCCTTGTCTT		ukaryot ammalia
14567 TCTTCTTTCTCCTAGAAACAGACCATTCCATCAATTAACTCCATCAGTAGCAGATGGGG 14626 JOINNAL JOINNAL AUTHORS 320	Qγ			(base irren,B
320	Dp	TCTTCTTTCTCCTAGAAACAGACCATTCCATCAATTAACTCCATCAGTATGCAGATGGGG		Mus musculu: Unpublished
14627 TTTCTGTGATAGACCACACTCTGGTTTTGCTTAAGAAGCTGCTGTGTCTCTTTTT 14686 320 320 14687 GACCATTAAGTCTTCACAAAACTCTGTTCTAGTAAGGAAACCATGTGGGTCACTCA 14746 320 320	δy			(base irren,B
320 320 14687 GACCATTAAGTCTTCACAAAACTCTGTTCTAGTTAGGAAACAAGCCATGTGGGTCACTCA 14746 320 320	QQ	TTTCTGTGATAGACCACACTCTGGTTTTGCTTAAGAAGCTGCTGTGGTGTCTGTC	A M	Anderson, S., Boukhgalter,
14687 GACCATTAAGTCTTCACAAAACTCTGTTCTAGTTAGGAAACAAGCCATGTGGGGTCACTCA 14746 320 320	δ			ook, A.,
320 320	QQ	GACCATTAAGTCTTCACAAAACTCTGTTCTAGTTAGGAAACAAGCCATGTGGGGTCACTCA		Faro, S., B Ginde, S.,
	Óγ		- K	Kamat, A.,

100 bp f 2755 bp in length

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173 GlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyPro 192
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                                                                                                                                                                                                                                                                                                                                                                                                                                    53227 53326: gap of 50 100 bp 53327 69572: contig of 16246 bp in length 69573 69672: contig of 19349 bp in length 89022 89121: gap of 100 bp 1
                                                                                                                                                                                                                                                                                       63: gap of 100 bp 36938: contig of 19575 bp in length
                                                                                                                                                                                                                                                                                                                                                                   138: gap of 100 bp
53226: contig of 16188 bp in length
                                                                                                                             of 100 bp contig of 4803 bp in length
                                                                                                                                                                                                          9: gap of 100 bp 17263: contig of 8454 bp in length
                contig of 951 bp in length
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37484 c 36555 g 52844
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McCarthy, M., McEwan, P., McKernan, K., Meldrim, J., Meneus, L., Mihova, T., Mlenga, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., Norman, C.H., O'Connor, T., O'Donnell, P., O'Neil, D., Olliver, J., Peterson, K., Phunkhang, P., Pierre, N., Pollara, V., Raymond, C., Retta, R., Rieback, M., Riley, R., Rise, C., Rogov, P., Romen, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schupback, R., Stange-Thomann, N., Stojanovic, N., Strauss, N., Suzamanian, A., Talamas, J., Tesfaye, S., Theodore, J., Travers, M., Travis, N., Trigilio, J., Vassiliev, H., Viel, R., Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zinnoun, J., Zembek, L., Zimmer, A. and Zody, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Submitted (10-JUN-2002) Whitehead Institute/MIT Center for Genome Streat, 320 Charles Street, Cambridge, MA 02141, USA On Jun 10, 2002 this sequence version replaced gi:21328559.

All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (10-MAR-2002) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA 3 (bases 1 to 182029)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   is believed to be correct as given, however the sizes of the gaps between them are based on estimates that have
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        provided by the submittor.
This sequence will be replaced
by the finished sequence as soon as it is available and
the accession number will be preserved.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      consists of 10 contigs. Gaps between the contigs are represented as runs of N. The order of the pieces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Quality coverage: 8.0 in Q20 bases; agarose-fp
Quality coverage: 8.0 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Center project name: 124628
Center clone name: 213_K_19
Center clone name: 213_K_19
Center clone name: 214_18
Sequencing vector: plasmid; n/a: 100% of reads Assembly program: phrap; version 0.960731
Consensus quality: 179506 bases at least Q40
Consensus quality: 180723 bases at least Q40
Consensus quality: 180500 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Insert size: 180000; agarose-fp
Insert size: 181129; sum-of-contigs
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                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
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COMMENT

901 others

52844 t

Conservative: Mismatches: Indels:

Gaps:

Length: Matches:

Faro, S., Ferreira, P., Fitzo Gardyna, S., Gord, S., Grahar		Db 47487 GTTCCTTCTGTGTTTTTTAAATCAACAGTTAAAACTTTACATTCCTA-GGATGTCCGCCT 47545
Camarata,J., Chang,J., Chaz Cook,A., Cooke,P., DeArella		319AspAsnGlyCysProPro
Birren, B., Nusbaum, C., Land	AUTHORS	Db 47427 GCAIGCAAGIGGIACAAGGCIGIGACITIGAIAICITAAACACAGCIGAGGAAAIGCAGG 47486
Research, 320 Charles Stree	JOURNAL	Ογ 318 318
Direct Submission	BITIT	Db 47367 TGTGCTGTACAGTCCACATCTGAGAACATCTGCCCGGGTTCTACACAGGGACACCCATTG 47426
Topnam,K., Travers,M., Trav Viel,R., Vo,A., Wilson,B.,		Оу 318 318
		Db · 47307 CGTCATAAAGCCTAGCCCAACCCAGTCCCACCTTTCTTCACTGTGTGTG
Roman, J., Rosetti, M., Roy, P.		Оу 318 318
Oliver, J., Peterson, K., Ph		Db 47247 AACCTCCAGCCGATCCAAGCCGACAGTGTATCAGAACCCACCC
McCartny, M., McEwan, P., McK Meneus, L., Mihova, T., Mleng		ОУ 318 318
MacLean, C., Macdonald, P., N.		Db 47187 GTGTGGGTCCCTCATGCTGGTCCACAAGCCAGACTTTGGTTCTGAAGTGTGCTTATTTAC 47246
Jones, C., Kamat, A., Karatas		Qy 318 318
Ginde, S., Gord, S., Goyette,		Db 47127 TGCCTTTCTGTCTTTTGACAGAAAGTCTTTTGCAAAACTATACTAGTTAGGAGCCAAGC 47186
Cooke, P., DeArellano, K., De		Qy 318 318
Anderson, S., Barna, N., Bast Brown, A., Camarata, J., Camp		Db 47067 TGCAGAFAGGGTTTCTGTGACAGAGTCCACATTCTGGTTTTGCTTAAGAAGCTGTTGTGG 47126
	AUTHORS	Оу 318 318
	JOURNAL	Db 47007 CCTTCATCTTTCTTCTTCTTCTTAGAAACAGACCATTTTATCAGTTAACTCCACCAGTA 47066
Birren, B., Nusbaum, C. and I	AUTHORS	Оу 318 318
Eukaryota; Metazoa; Unordat Mammalia; Eutheria; Rodenti		Db 46947 CCCTGTACCCCAAATACTTCCTTCAAGATATTCTACACTGGCTGCTCCCTGACCATCCT 47006
nouse mouse. Mus musculus	SOURCE	Ογ 318 318
ACIUZBIB.Z GI:ZZ3815U4 HTG; HTGS_PHASE1; HTGS_DRAF	KEYWORDS	Db 46887 TGTTCCTGCTTAGACATTATCAGGTCTCTACTCATTTAGATGAGCCAGGCCTTCAGAAGA 46946
unordered pieces. AC102618	ACCESSION	Ογ 318 318
	DEFINITION	Db 46827 AAAACAGCAGGGACCCTGTGTATCCCTCTGGATGCTTCAGTGCTGTCACTCAGGACCCTG 46886
,	RESULT 12 AC102618	Ογ 318 318
AGGAAGGCTGCAGTTTGCATGGGCTTTTT	Db 47793	Db 46767 GAGGAATAAGGCAGTGTGGGTTGGCTAAACCAACCCCCAGGAGTCCCCTAATTACAC 46826
GlyProGlyGluAspCysAlaGlyLeuIl		Ογ 318 318
	47	46707
ThrSerProAspTyrLysAsnTrpLysAl	Qy 398	***** GGACCACCACCACCACCACCACCACCACCATIGGAGCATITGGCICTIGCAAGCAATIGAA
Serials of process of the serial Aspects of the serial ser	UY 378 Db 47724	Qy 293 GlyproProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGlu 312 
GAACAGGT-ATGATATGTCAGCTGCACAC	47	
GluGlnGln	QY 365	273 ValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLys 292
GATGCTAAGCTTTCTGTGAAGACAAATC	47606	Oy 253 ProGlyProGlnGlyProProGiyPheGlnGlyLeuGlnGlyThrValGlyGluProGly 272
CACTGGAAGAACTTCACAGATAAATGCTA	Db 47546	
HisTrpLysAsnPheThrAspLysCysTy	Qy 325	Ov 233 Glvbroclvcardlvkanbroclvbrockvontrosonur.

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Nusbaum,C., Lander,E., Alli,A., Allen,N.,
Bastien,V., Boguslavkiy,L., Boukhgalter,B.,
Campoplano,A., Chang,J., Chazaro,B.,
M., Collint,S., Collymore,A., Cook,A.,
V., Dewar,K., Diaz,J.S., Dodge,S., Faro,S.,
ette,M., Gage,D., Galagan,J., Gardyna,S.,
ette,A., Kells,C., Larocque,K.,
Horton,L., Hulme,W., Illev,I., Johnson,R.,
ratas,A., Kells,C., LaRocque,K.,
V., Manjor,J., Marquis,N., Matthews,C.,
P., Major,J., McPheeters,R., Moldrim,J.,
Mlenga,V., Murphy,T., Naylor,J., Ngupen,C.,
O'Connor,T., O'Donnell,P., O'Neil,D.,
Phunkhang,P., Pierre,N., Pollara,V.,
Rieback,M., Riley,R., Schauer,S., Schubback,R.,
Spencer,B., Stange-Thomann,N., Stojanovic,N.,
Tzalis,N., Tesfaye,S., Theodore,J.,
Tzalis,N., Trigillo,J., Vassillev,H.,
Sh. Wu,X., Wyman,D., Ye,W.J., Young,G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                208 bp DNA linear HTG 21-AUG-2002
26G16, WORKING DRAFT SEQUENCE, 11
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tia; Sciurognathi; Muridae; Murinae; Mus.
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                                |||::::::||| :::::: |||
ACTTGGTTGGAGAAACTATAATTTAGAGATA- 47723
                                                                                                                                                                                                                                                                                                                                                                                                   ::::::||| ||||
-----AATTCATGGTCTCATAAACAA 47792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCCAGGTATGAGAGTATATGAATTCAAA 47852
                                                                                                                                                                                                                                         ---TrpIleLysLysGlnMetValGlyArgGlu 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaGlyGlnProAspAsnTrpGlyHisGlyHis 417
                                                                                                                   SerSerHisLeuValPheIleAsnThrArgGlu 364
                                                                                                                                                                                                                                                                                                                                                                   GluargGluasnGluTrpLysTrpLeuaspGly 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleTyrAlaGlyGlnTrp---AsnAspPheGln 436
TyrTyrPheSerValGluLysGluIlePheGlu 344
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426G16
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COMMENT

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clone_lib="RPCI-23 Female Mouse BAC"
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              Karatas, A., Kells, C., Landers, T., Levine, R., Lindblad-Toh, K.,
Liu, G., MacLean, C., Landers, T., Levine, R., Lindblad-Toh, K.,
McCarthy, M., Meldrim, J., Meneus, L., Mihova, T., Mienga, V.,
Murphy, T., Naylor, J., Nguyen, C., Nicol, R., Norbu, C., Norman, C.H.,
O'Connor, T., O'Donnell, P., O'Neil, D., Oliver, J., Peterson, K.,
Phunkhang, P., Plerre, N., Raymond, C., Retta, R., Rise, C., Rogov, P.,
Roman, J., Roy, A., Schauer, S., Schupback, R., Seaman, S., Severy, P.,
Smith, C., Spencer, B., Stange-Thomann, N., Stojanovic, N., Talamas, J.,
Tesfaye, S., Theodore, J., Topham, K., Travers, M., Vassiliev, H.,
Viel, R., Wo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, J.,
Lamer, A. and Zody, M.
Direct Submission
Submitted (21-AuG-2002) Whitehead Institute/MIT Center for Genome
Research, 320 Charles Street, Cambridge, MA 02141, USA
OA Aug 21, 2002 this sequence version replaced gi:17061704.
All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RW/RepeatMasker.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Center: Whitehead Institute/ MIT Center for Genome Research
Horton,L., Hulme,W., Illev,I., Johnson,R., Jones,C., Kamat,A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NOTE: This is a 'working draft' sequence. It currently consists of 11 contigs. The true order of the pieces is not known and their order in this sequence record is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Insert size: 198000; agarose-fp
Insert size: 192208; sum-of-contigs
Quality coverage: 8.8 in Q20 bases; agarose-fp
Quality coverage: 9.1 in Q20 bases; sum-of-contigs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequencing vector: Plasmid: n/a; 100% of reads Sequencing vector: Plasmid: n/a; 100% of reads Chemistry: Dye-terminator Big Dye; 100% of read Assembly program: Phrap; version 0.960731 Consensus quality: 190144 bases at least Q40 Consensus quality: 191397 bases at least Q30 Consensus quality: 191862 bases at least Q20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9134: gap of 100 bp 74024: contig of 64890 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24: gap of 100 bp 88784: contig of 14660 bp in length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     127843 127942: gap of 100 bp
127943 150179: conilg of 22237 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150180 150279: gap of 100 bp
150280 188446: config of 38167 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1214 1313; gap of 100 bp 100 bp 1310; contig of 1788 bp in length 1310; contig of 1788 bp in length 1310 3201; gap of 100 bp 100 bp 13202 6759; contig of 3558 bp in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     150280 188446: contig or 3010, 2r ... 188447 188546: gap of 100 bp 188547 193208: contig of 4662 bp in length. Location, Qualifiers
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Center clone name: 426_G_16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Center code: WIBR
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74125 8878
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98420 CCAACCCCAGCATCAGAGGTCAACGGTAAGTCCTAATCGTCCTTCTCAGCTAGAATTGTG 98479
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           173 GlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGlyGluProGlyPro 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253 ProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrValGlyGluProGly 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlyProProGlyProProGlyProSerGlyAlaValValProLeuAlaLeuGlnAsnGlu 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               153 PheThrIleLeuGlnGlyProProGlyProArgGlyProArgGlyAspArgGlySerGln 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyLysGlySerLysGlySerGlnGlyProLysGlySerArgGlySerProGlyLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               273 ValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyMetProGlyProLys
                                                                                                                                                                                                                                                                                                                                                                                                            1000 others
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Matches:
Conservative:
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188547. .193208
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                                                                                   6860. 9034
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                                                                                                                     9135. 74024
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107551. .127842
/note="assembly_fragment"
127943. .150179
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981.00
41.25%
38.21%
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AP000915 188439 bp DNA linear PRI 27-APR-2002
Homo sapiens genomic DNA, chromosome 18p clone:RP11-720L2, complete
                                                                                                                                                    Db 153303 CCAGGGGACAGGGCAGTGCATGTGCTTGAGACTGAGCCCAACCCCCAGTGTGGCCCCA 153244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db 153012 TCAAACTCCTGGCCTCAAGTGATCCACCTAACTTTAGTCTCCCAAAGTGCTGGGATTACAG 152953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                 153543 AAAGAGGACTCCCCGGCCCTCAGGCCCTCCTGGCTTCCAGGGACTTCAGGGCACCGTT 153484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db 153191 -GCCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACCTCCACATCCCGGGTT 153133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Db 153132 CAAGTGATTCTCCTGCCTTAGCCTCCCAGGTAGCTGGGACTACAAGCGTGTGCCCCCACA 153073
                                                                                                                                                                                                                                                                                                                                                                                                                                                325 sTrpLysAsnPheThrAspLysCysTyrTyrPheSerValGluLysGluIlePheGluAs 345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345 pAlaLysLeuPheCysGluAspLysSerSerHisLeuValPheIleAsnThrArgGluGl 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               365 uGlnGlnTrpIleLysLysGlnMetValGlyArgGluSerHisTrpIleGlyLeuThrAs 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     385 pSerGluArgGluAsnGluTrpLysTrpLeuAspGlyThrSerProAspTyrLysAsnTr 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  uAspCysAlaGlyLeuIleTyrAlaGlyGln-----------TrpAs 433
         229 ProGlyLysProGlyProGlnGlyProSerGlyAspProGlyProProGlyProProGly 248
                            153603 CCTGGGAAGCCCGGCCCTCAGGGCTCCAGTGGGGACCCACCGGGCCCCCGGGCCCACCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hattori,M., Ishii,K., Toyoda,A., Taylor,T.D., Hong-Seog,P.,
Fujiyama,A., Yada,T., Totoki,Y., Watanabe,H. and Sakaki,Y.
Homo sapiens genomic DNA
Published Only in Database (1999)
                                                                               249 LysGluGlyLeuProGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            405 pLys------AlaGlyGlnProAspAsnTrpGlyHisGlyHisGlyProGlyGl
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens DNA, clone: RP11-720L2.
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| 152952 GTGTGAG 152946
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AP000915/c
LOCUS
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KEYWORDS
SOURCE
ORGANISM
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|Db 153903 AATTIGGAGATTITATAAGAAAAAATTATICATAACTATCATTCAGTGGATTICAT 153844
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  131 AsnLeuSerValIleMetGluGluMetLysLeuValAspSerLysHisGly-----Gln 148
22425 22524: gap of 100 bp 22525 38094: contig of 15570 bp in length 38095 38194: gap of 100 bp 38195 49220: contig of 11026 bp in length 49221 49320: gap of 100 bp 6495 6694: gap of 17074 bp in length 66395 66495: contig of 25198 bp in length 66495 91792: gap of 100 bp 91692: contig of 25198 bp in length 91693: contig of 25198 bp in length 120870 120869: contig of 29077 bp in length 120870 169088: contig of 48119 bp in length.
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191
21
53
98
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Mismatches:
Indels:
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33537 c 34088 g 52660 t
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/note="assembly_fragment"

38195. .49220

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91793. 120869
120970 169088
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52.62%
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oyoda,A., Taylor,T.D., Hong-Seog,P., otoki,Y., Watanabe,H. and Sakaki,Y. Masahira Hattori, The Institute of Physical RTKEN), Genomic Sciences Center (GSC);	1-7-2 Submitto-ChOU, TSUTUME. K. YOKOMAME, Kanagawa 230-0045, Japan (E-mail:hattori@gsc.riken.go.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170) On Apr 26, 2002 this sequence version replaced gi:9188470. S	20L2" 27 g 53275 t	Length: 188439 Matches: 191 Conservative: 21 Mismatches: 53 Indels: 98 Gaps: 8	57) x AP000915 (1-188439)	AsnLeuSerVallleMetGluGluMetLysLeuValAspSerLysHisGlyGln 148         :::::        AATTIGGAGATTTTATAAGAAGAAAAATTATCATAACTATCATTCACAGGGGATTTCAT 44965	LeulleLysasnPheThrIleLeuGlnGlyProProGlyProargGlyProargGlyAsp 168  ::-   GTTGACACCTTTTTTTGTGCTTTAGGTCCACGGGCCCCAGGGGTCCAAGAGGTGAC 44905	ArgGlySerGlnGlyProProGlyProThrGlyAsnLysGlyGlnLysGlyGluLysGly 188 	GlubroGlyproProGlyProAlaGlyGluArgGlyProIleGlyProAlaGlyProPro 208 	GlygluargglyglyLysGlySerLysGlySerGlnGlyProLysGlySerargGlySer 228 	ProglyLysProglyProglnGlyProSerGlyAspProGlyProProglyProProgly 248 	LysGluGlyLeubroGlyProGlnGlyProProGlyPheGlnGlyLeuGlnGlyThrval 268 	GlyGluProGlyValProGlyProArgGlyLeuProGlyLeuProGlyValProGlyWet 288 	ProGlyProLysGlyProProGlyProSerGlyAlaValValProLeuAla 308 	LeuGinasngluprothrProalaProGluaspasnGly	
Hattori, M., Ishii, K., Fujiyama, A., Yada, T., Direct Submission Submitted (17-DEC-1999 and Chemical Research	1-7.2. Suchito Chou, Faurum. Fut, ro Tel:81-45-503-9111, Fax:81-45-503- On Apr 26, 2002 this sequence vers Location/Qualifiers e /organism="Homo sapiens" /db_xref="taxon:9606"	/map_ rop /clone="RP11- 54003 a 41134 c 40	Alignment Scores: Pred. No.: Score: Score: Score: St. 50 Best Local Similarity: 37.88% DB:	3-712A-2_COPY_91_547 (1-45	AsnLeuSerVallleMetGluGlu          ATTTGGAGATTTTATAAGAAGAA	LeulleLysAsnPheThrIleLeu ::: STTGACACCTTTTTTTATGCT	ArgGlySerGlnGlyProProGly 	3luProGlyProProGlyProAla 	31yGluargGlyGlyLysGlySer 	ProGlyLysProGlyProGlnGly 	LysGluGlyLeuProGlyProGln 	31yGluProGlyValProGlyPro 	ProGlyProLysGlyProProGly                     CAGGCCCCAAGGCCCCCCGGC	LeuGlnAsnGluProThrProAla 	
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                                                                                                   Center: Whitehead Institute/ MIT Center for Genome Research
                                                                                                                                                                                                                                                                                                                                                                * sequencing reads that have not been assembled into contigs. Runs of N are used to separate the reads and the order in which they appear is completely arbitrary. Low-pass sequence sampling is useful for identifying clones that may be gene-rich and allows overlap relationships among clones to be deduced. However, it should not be assumed that this clone will be sequenced to completion. In the event that the record is updated, the accession number will be preserved.
Research, 320 Charles Street, Cambridge, MA 02141, USA All repeats were identified using RepeatMasker:
Smit, A.F.A. & Green, P. (1996-1997)
http://ftp.genome.washington.edu/RM/RepeatMasker.html
                                                                                                                                                                                 Web site: http://www-seq.wi.mit.edu
Contact: sequence_submissions@genome.wi.mit.edu
Contact: Project Information
Contact project name: L6145
Center clone name: 179_K_3
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Search completed: March 21, 2003, 11:17:28 Job time: 3321.43 secs

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